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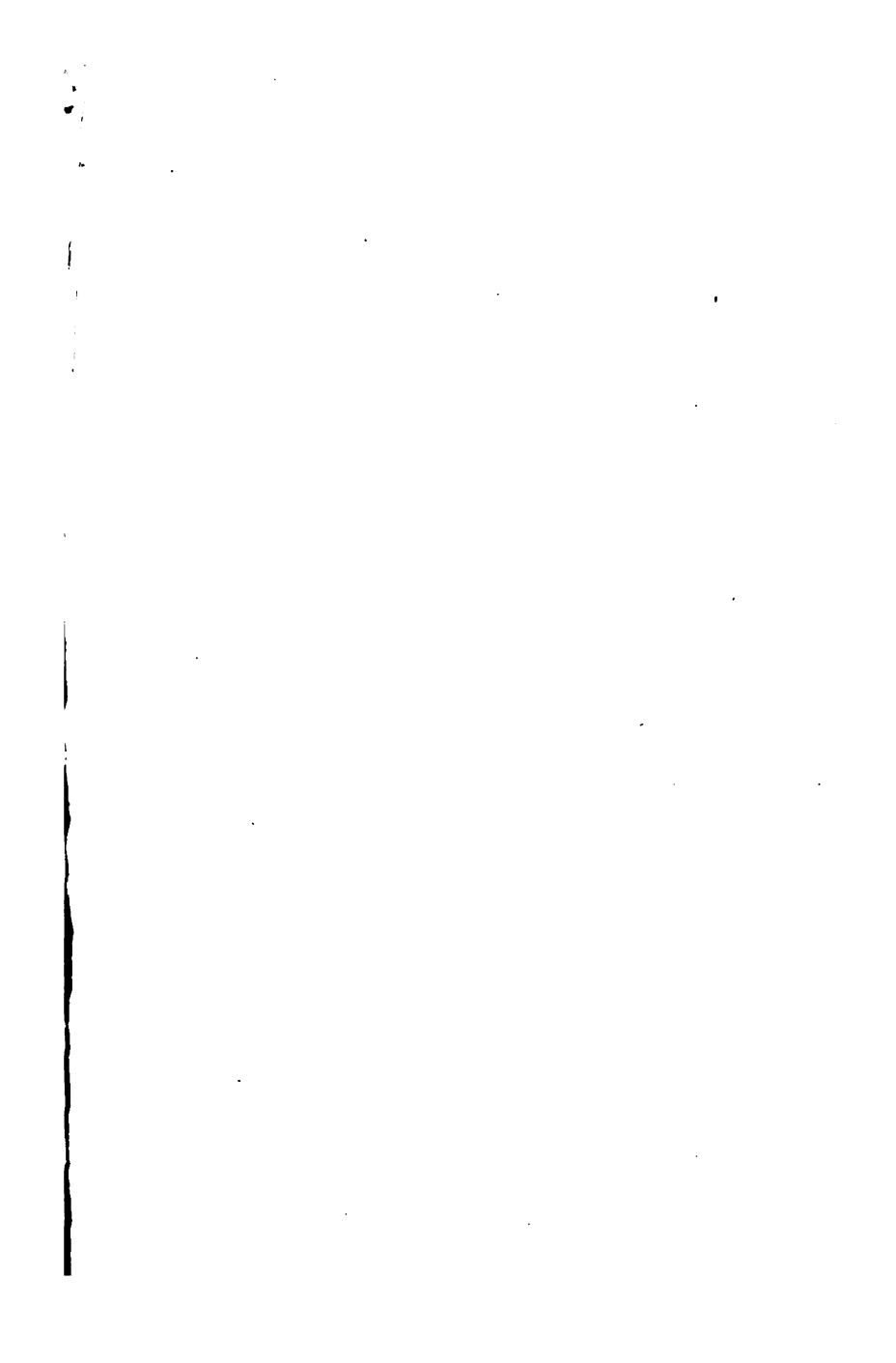
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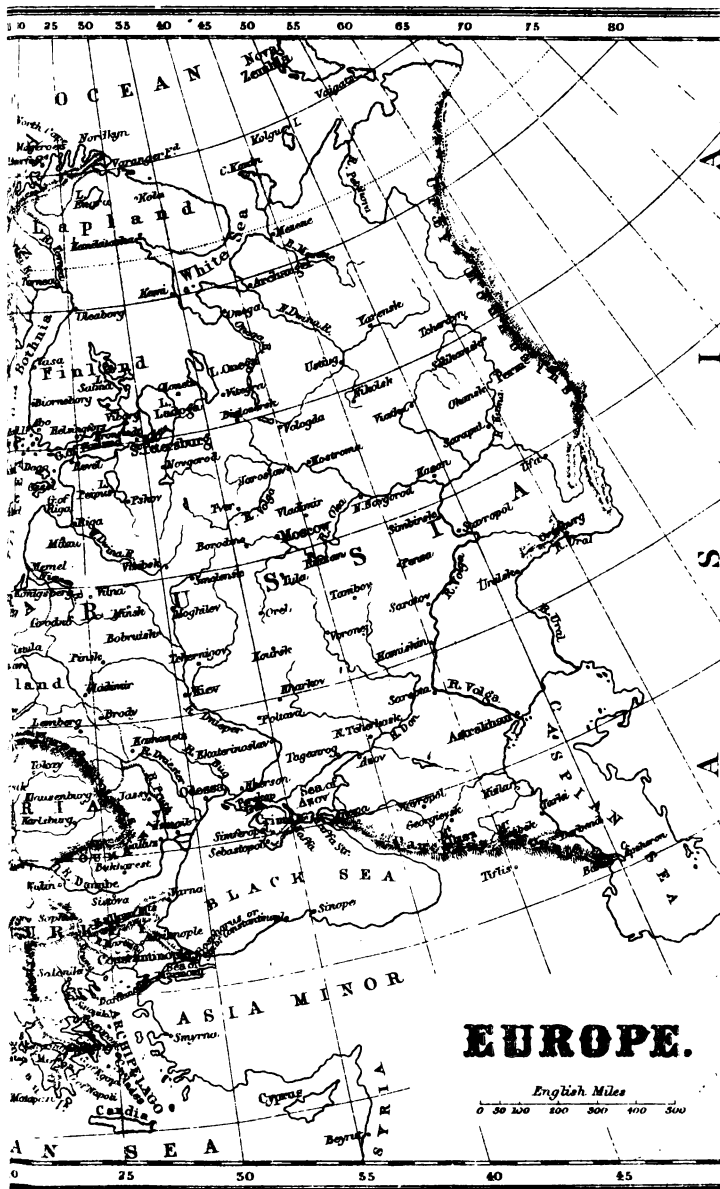
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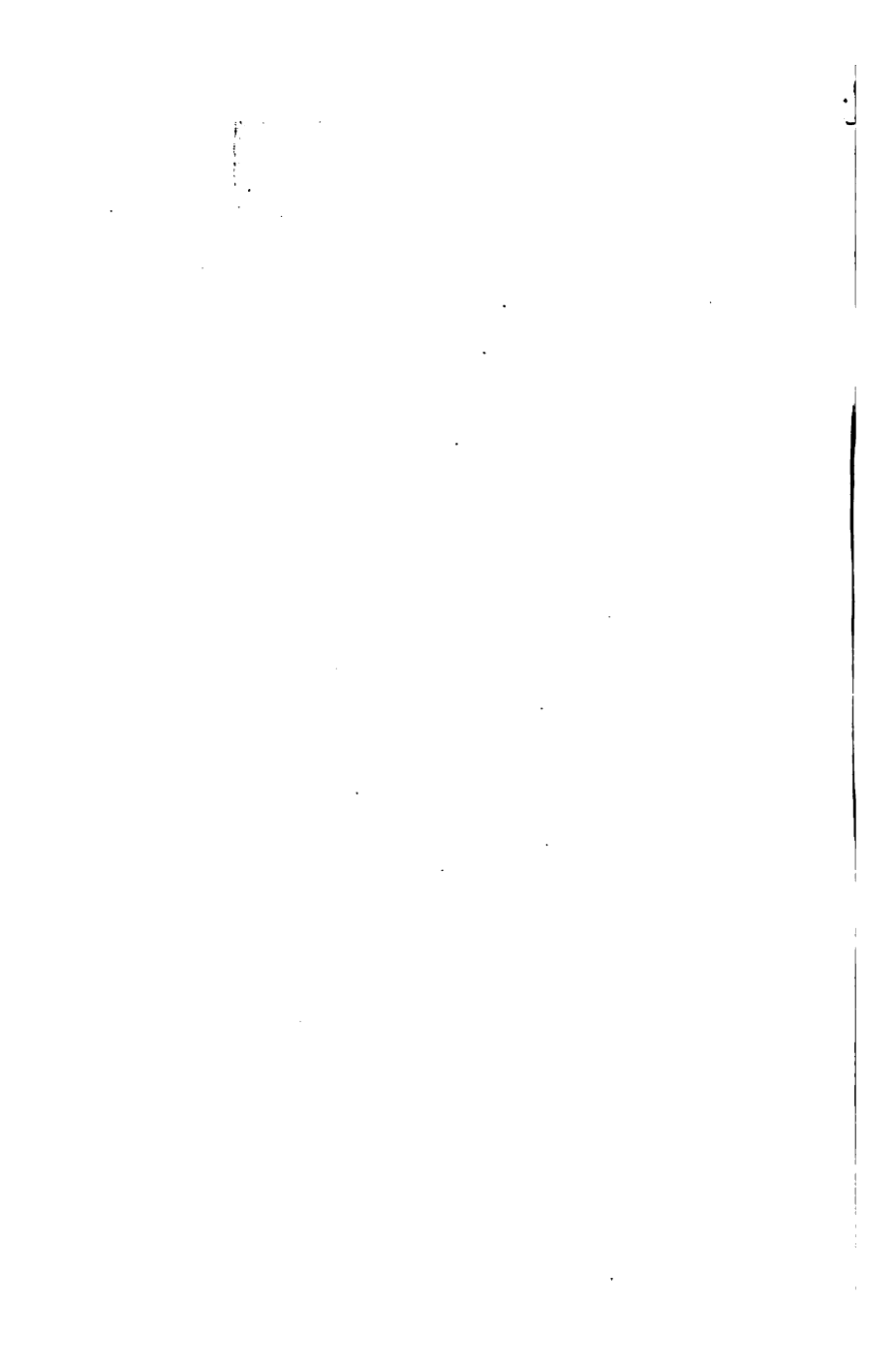
ELEMENTS OF GEOGRAPHY:

MATHEMATICAL, PHYSICAL, AND POLITICAL.



PUBLISHED FOR THE SCOTTISH SCHOOL-BOOK ASSOCIATION BY
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PREFACE.

THIS volume has been constructed on the assumption that the Map is essential to the study of Geography. Space in the letterpress has been greatly economized, on the one hand, by the omission of much that is best learned from the Map alone, such as many definitions of locality, boundaries, and minor physical features; and, on the other hand, freer admission has been given to those descriptive details which tend so much to give zest and interest to the subject.

The Exercises appended to the different sections are founded more upon the Map than upon the text, and are of an exhaustive and suggestive nature; calling upon the pupil to study the Map, and work out for himself much interesting information. Indeed, it has been attempted, by means of these queries, to make the study of Geography, as far as possible, of a *practical* kind, and no more than is absolutely necessary a mere effort of memory.

It has been attempted to generalize details as far as possible, for the purposes of comparison, and of presenting one broad general view rather than a multiplicity of details scattered over the whole work. Hence the General Geography of the Continents is treated more at large, and that of individual countries less in detail, than in works of a similar character.

In compiling the book, the maxim has never been lost sight of—" *Omne tulit punctum qui miscuit utile dulci.*"

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ABBREVIATIONS USED IN THE WORK.

<i>A.M.</i> Absolute Monarchy. <i>bet.</i> between. <i>b.-p.</i> birth-place. <i>B.</i> Bay. <i>C.</i> Cape. <i>cap.</i> capital. <i>co.</i> county. <i>ch.</i> chief. <i>def.</i> defeated. <i>Dy.</i> Duchy. <i>E.</i> East. <i>Eq.</i> Equator. <i>ft.</i> feet. <i>F.</i> Firth. <i>G.</i> Gulf. <i>gov.</i> government. <i>Gd.</i> Grand. <i>Gt.</i> Great.	<i>G. C.</i> Greek Church. <i>in.</i> inches. <i>I.</i> Isle or Island. <i>Isth.</i> Isthmus. <i>Km.</i> Kingdom. <i>L.</i> Lake. <i>Lat.</i> Latitude. <i>Lon.</i> Longitude. <i>l. b.</i> left bank. <i>Ld.</i> Land. <i>L. M.</i> Limited Monarchy. <i>Mt.</i> Mountain. <i>Mnfs.</i> Manufactures. <i>m.</i> miles. <i>Medit.</i> Mediterranean. <i>N.</i> North. <i>O.</i> Ocean. <i>pop.</i> population.	<i>Pen.</i> Peninsula. <i>Pl.</i> Plain. <i>Plat.</i> Plateau. <i>Py.</i> Principality. <i>pron.</i> pronounced. <i>prov.</i> province. <i>Prot.</i> Protestant. <i>R.</i> River. <i>R. C.</i> Roman Catholic. <i>r. b.</i> right bank. <i>Rep.</i> Republic. <i>S.</i> South. <i>sq.</i> square. <i>Str.</i> Strait or Straits. <i>smt.</i> summit. <i>trib.</i> tributary. <i>vol.</i> volcano. <i>W.</i> West.
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ELEMENTS OF GEOGRAPHY.

GEOGRAPHY is a description of the Earth.

It is divided into three branches, viz.:—**Mathematical, Physical, and Political Geography.**

(1.) **Mathematical Geography** treats of the position of the earth in space; of its form, size, and motions; of its artificial divisions; and of the true position of places on its surface.

(2.) **Physical Geography** treats of the natural features and arrangements of the earth,—such as its configuration and structure, climate, productions, and inhabitants.

(3.) **Political Geography** treats of the earth as divided into states or countries, in regard to their extent, population, government, religion, language, industries, and civilization.

I.—MATHEMATICAL GEOGRAPHY.

The Earth is a planet, or member of the Solar System.

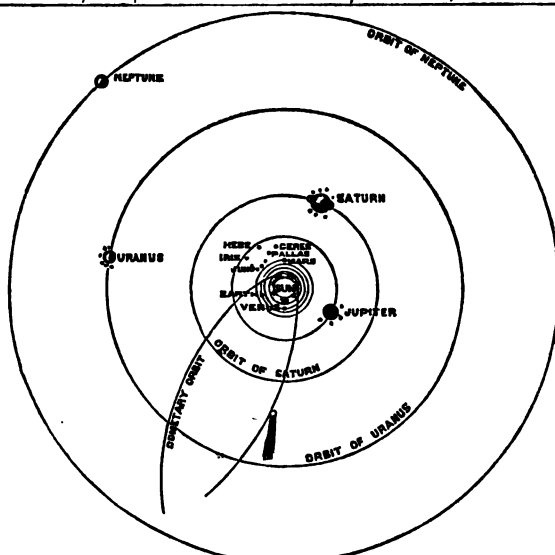
The Solar System is that group of heavenly bodies of which the SUN is the centre round which they revolve, and from which they receive both light and heat. It consists, so far as at present known, of 134 bodies, including the Sun, 9 Major, or larger Planets, (some of them having attendant moons or satellites,) and 106 Minor, or smaller Planets, called Planetoids; besides a vast number of Comets, which revolve round the Sun with prodigious velocity and in very eccentric orbits.

The planetary bodies revolve around the Sun from west to east at different distances, in different periods, in different planes,* and in nearly circular orbits. The Planets whose orbits are within that of the Earth are termed *inferior*; the others are termed *superior*. At the same time, the Sun itself, with the whole Solar System, is moving round some other body, as yet undetermined, the centre of a still larger system, at the rate of 150,000,000 miles per annum, or 17,600 miles per hour.

* A plane is a flat surface. The plane of a planet's orbit is an imaginary large flat surface supposed to pass through the centre of the sun, and round the circumference of which the planet performs its revolution.

THE SOLAR SYSTEM.

PLANETS.	No. of Satellites.	Mean Distance from the Sun, in Miles.	Period of Revolution round the Sun, in Days.	Period of Rotation on Axis, in days, hrs., m.	Comparative Volume, or Size, Earth = 1.
SUN,....	..	.....	..	25 7 48	1,245,000,000
Vulcan,...	..	13,000,000	19½	?	?
Mercury,...	..	35,000,000	88	1 0 5	0.052
Venus,....	..	66,000,000	225	0 23 21	0.861
Earth,.....	1	92,000,000	365½	0 23 56	1.000
Moon, ..	..	.....	..	29 12 44	0.024
Mars,.....	..	140,000,000	687	1 0 37	0.139
Planetoids, ..	..	259,000,000	1,685	.. .. .	..
Jupiter,....	4	479,000,000	4,333	0 9 55	1,387.481
Saturn,....	6	878,000,000	10,759	0 10 29	746.898
Uranus,....	4	1,766,000,000	30,687	0 9 30	72.359
Neptune,...	1	2,766,000,000	60,126	?	98.664



SOLAR SYSTEM.

Form of the Earth.—The form of the Earth is nearly that of a globe or sphere—not being perfectly round, but compressed or flattened on two opposite sides, somewhat like an orange.

Such a figure is termed an *oblate spheroid*.

The inhabitants of the globe, on the opposite side from us, have their feet turned towards ours, and are therefore termed the *Antipodes*.

Proofs of the Earth's Rotundity.—(1.) Our circle of vision becomes wider the greater the elevation of our position on the earth's surface.

(2.) The tops of masts, towers, and mountains are, on approaching them, first observed, and afterwards the lower portions.

(3.) In travelling a great distance north or south, new stars appear in view in advance, while others disappear behind us.

(4.) In circumnavigating the globe, navigators sailing due west or east, arrive at their point of departure.

(5.) The shadow of the earth upon the moon during an eclipse is always round.

(6.) In making a canal, allowance must be made for a dip of eight inches in each mile to keep the water at a uniform depth.

Size of the Earth.—The mean diameter of the Earth is 7912 miles, (or nearly 8000 miles)—the Equatorial, or larger diameter, being 7925 miles, and the Polar, 7899.

If the Equatorial diameter were divided into 300 equal parts, the Polar diameter would measure 299 of them; that is, it is $\frac{1}{300}$ shorter. In an artificial globe of 18 inches diameter, this deviation from the spherical form would amount to about $\frac{1}{4}$ part of an inch.

The Circumference of the Earth is 24,856 miles, (or nearly 25,000 miles;) the Area, or superficial content, 197,000,000 square miles; the Volume, or solid content, 260,000,000,000 cubic miles; and the Weight, 5,425,092,500,000,000,000 tons.

Motions of the Earth.—The Earth has three motions:—

(1.) The motion through space along with the rest of the Solar System.

(2.) Its annual motion, or revolution round the Sun, in about 365 $\frac{1}{4}$ days.

(3.) Its diurnal motion, or rotation on its own axis, in about 24 hours.

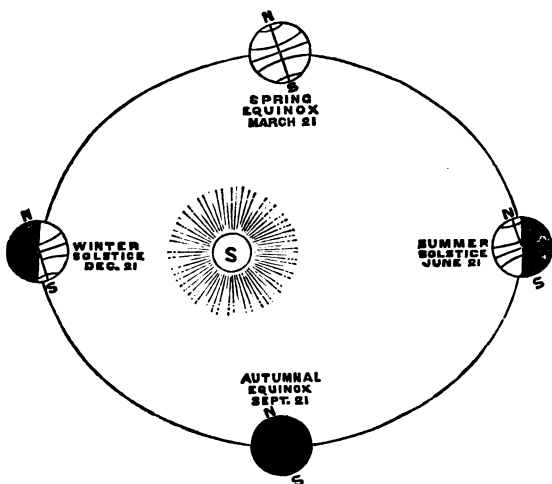
The Earth's motion round the Sun causes the changes of the seasons and the difference in the length of day and night: its motion on its own axis causes the apparent rising and setting of the Sun, or the alternation of day and night.

The Earth's Orbit, or path round the Sun, is about 184,000,000 miles in mean diameter, and 565,000,000 in circumference. Its form is not a circle, but rather an ellipse, so that the earth is not equally distant from the sun at all periods of the year; its perihelion, or nearest point, being at the beginning of the year, or northern winter, and its aphelion, or farthest point, about the middle of the year, or northern summer. As the difference is only about 3,000,000 miles, it has no perceptible influence on the degree of solar heat, which is greatest in summer, when the sun is more nearly vertical, and least in winter, when his rays fall more slantingly on the earth.

The Axis of the Earth is an imaginary line which passes through its centre, and round which it rotates daily.

The North and South Poles are the extreme points of the Axis.

The Axis is inclined to the plane of the earth's orbit at an angle of nearly 23 $\frac{1}{2}$ °, so that the Poles are alternately turned towards the sun in the course of a revolution, which causes the succession of the seasons. Were the Axis perpendicular to the plane, the same season would prevail in the same part of the world all the year round.



THE SEASONS.

The Moon is the Satellite, or attendant, of the Earth. Its mean distance is nearly 240,000 miles, and it is only about $\frac{1}{49}$ of the size of the Earth. It has four motions:—

- (1.) A motion through space with the rest of the Solar System.
- (2.) An annual revolution round the Sun along with the Earth.
- (3.) A revolution round the Earth from west to east, in 29 days, 12 hrs., 44 min.
- (4.) A rotation round its own axis in the same time.

Phases of the Moon.—The light of the moon is entirely borrowed from the sun, and is reflected to us. The phases of the moon depend, therefore, on its relative position to the earth and sun: when these three bodies are nearly in a line, with the earth between the sun and the moon, the illuminated face of the moon is turned towards us, and it is then "full moon;" when the moon is between the other two, its dark side is presented to us, and it is then "new moon."

Eclipses.—(1.) When the sun, earth, and moon are exactly in the same straight line, with the earth between, the earth's shadow is thrown upon the moon, causing an eclipse of the moon, which can take place, therefore, only at full moon. (2.) When the moon is exactly between the sun and the earth, and in the same straight line, the sun is eclipsed, which can, therefore, take place only at new moon.

An eclipse of the sun and of the moon would alternate once a fortnight, were it not that the plane of the moon's orbit is $5^{\circ} 9'$ inclined to that of the earth, so that the moon is only occasionally in such a position as to cause an eclipse; that is, never less than twice in a year, never more than seven times, and generally four times.

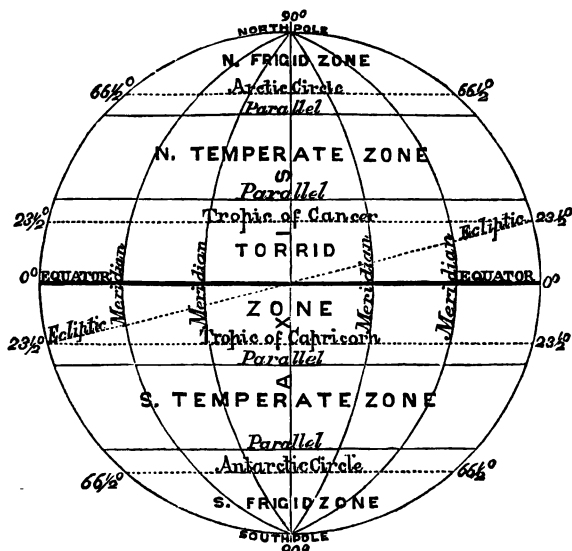
EXERCISES.—Calculate how long it would take to travel from the earth to the sun at the rate of 30 miles an hour. Reduce the periods of revolution of the planets to solar years, (365 $\frac{1}{4}$ days.) How long would a railway train, at 30 miles

an hour, take to go round the globe? How fast does the earth rotate per hour or second at the Equator? How fast does it revolve through space? Whether is the rotation fastest at the Equator or at the Poles? What is the length of the earth's axis?

MATHEMATICAL DIVISIONS OF THE EARTH.

For the purpose of determining the position of places, a great number of imaginary lines are supposed to be drawn on the earth's surface, as represented on maps and artificial globes. These lines are all circles, and are of two kinds, Great Circles and Small Circles.

Every circle is divided into 360 degrees, each degree into 60 minutes, and each minute into 60 seconds. On the great circles, the degree measures 60 geographical miles, or about $69\frac{1}{8}$ English miles; on the smaller circles it diminishes with the size of the circle.



MATHEMATICAL DIVISIONS OF THE EARTH.

The GREAT CIRCLES divide the globe into two equal portions, and they comprise the Equator, Meridians, and Ecliptic.

The SMALL CIRCLES divide the globe into two unequal portions. These are the Parallels of Latitude, including the Tropics and the Polar Circles.

The **Equator** is a great circle passing round the middle of the earth at an equal distance from the Poles.

The Equator is also called the **Equinoctial Line**, because, when the sun is vertical there, the days and *nights are equal* all over the world.

The **Meridians** are great circles passing round the earth at right angles to the Equator, and cutting each other at the Poles.

A **Semi-Meridian** is that half of a Meridian which terminates in the Poles.

Meridians are so called because all places on the same meridian have *mid-day* (or midnight) at the same time.

The **Ecliptic** is a great circle cutting the Equator at two opposite points at an angle of nearly $23\frac{1}{2}^{\circ}$, and representing the sun's apparent path through the heavens in the course of a year; but in reality the path of the earth round the sun.

The Ecliptic is so named, because both the sun and the moon must be on or near it in the case of an *eclipse*. It is divided into 12 equal parts, called the **Signs of the Zodiac**, named after the constellations or groups of stars through which the sun appears to pass in the course of a year.

The Ecliptic has four important points,—the two **Solstices** and the two **Equinoxes**.

The **Solstices**, or **Solstitial Points**, are the farthest points of the Ecliptic north and south, where the sun is vertical on the 21st June, (midsummer in the Northern Hemisphere and midwinter in the Southern,) and on the 21st December, (midsummer in the Southern Hemisphere and midwinter in the Northern.) They are so called because at these points the sun appears to pause or *stand still* before receding.

The **Equinoxes**, or **Equinoctial Points**, are the points where the Ecliptic cuts the Equator, and where the sun is vertical on 21st March, (the Vernal Equinox,) and on 23rd September, (the Autumnal Equinox.) Days and nights are then equal all over the globe.

A **Hemisphere** is one half of the earth considered as a globe or sphere.

The Northern and Southern Hemispheres are formed by the Equator; the Eastern and Western Hemispheres by any given Meridian—generally by that of Ferro, one of the Canary Islands.

Latitude is the distance of a place north or south of the Equator.

Longitude is the distance of a place east or west of any given semi-meridian, commonly called the First Meridian.

Places on the Equator have no latitude; places on the First Meridian no longitude.

Different nations have a different First Meridian: the British reckon from the semi-meridian of Greenwich; the French from that of Paris; the Russians from that of St. Petersburg; the Americans from that of Washington, &c.

Longitude extends 180° east and 180° west, and is reckoned along the Equator, or the parallel passing through the place, and is the angle at the Pole which the meridian of the place makes with the First Meridian. Latitude is reckoned on the meridian of the place; for every place is understood to have a meridian and a parallel passing through it.

Parallels of Latitude are small circles drawn parallel to the Equator, and are used to indicate latitude.

The **Tropics** are two remarkable **Parallels of Latitude**, viz.:

The Tropic of Cancer, nearly $23\frac{1}{2}^{\circ}$ north of the Equator;

The Tropic of Capricorn, nearly $23\frac{1}{2}^{\circ}$ south of the Equator.

The Tropics are so named because the sun, in his apparent course along the Ecliptic, seems at these points to *turn back*.

The Polar Circles are two remarkable Parallels of Latitude, viz.:

The Arctic Circle, nearly $23\frac{1}{4}^{\circ}$ from the North Pole;

The Antarctic Circle, nearly $23\frac{1}{4}^{\circ}$ from the South Pole.

The Arctic Circle is so named from the constellation of the Great Bear, (in Greek, *Arctos*, a bear,) which is situated over it. Antarctic means "*opposite to Arctic*."

The Zones are Five Great Belts into which the earth is divided by the Tropics and the Polar Circles, viz.:

The Torrid Zone, between the Tropics;

Two Temperate Zones, between the Tropics and the Polar Circles;

Two Frigid Zones, between the Polar Circles and the Poles.

Characteristics of the Zones.—The Zones are chiefly distinguished by their climatic differences:—

The Torrid Zone, so called from its *scorching* heat, has the sun vertical twice in the year, the days and nights differ little in length throughout the year, and vegetation is most luxuriant.

The Temperate Zones have a milder or *temperate* climate, the sun never being vertical, the days and nights are more unequal, the four seasons are more distinct, and the productions of the earth less rich and exuberant than in the Torrid Zone.

The Frigid Zones, so called from their extreme cold, have one long intensely cold winter, when, for several weeks, the sun never rises, and one short hot summer, when for several weeks the sun never sets, (the period being longer or shorter at different places according to the latitude.) Vegetation is scanty and stunted.

Comparative Areas of the Zones.—Suppose the entire surface of the earth divided into 100 equal parts:

The Torrid Zone would be	= 40 parts
Two Temperate Zones, each 26	= 52 "
Two Frigid Zones, each 4,	= 8 "

100

Maps.—A Map is a representation of the whole earth, or of a part of it, on a flat surface. The top of a map, unless when otherwise expressed, is North; the bottom, South; the right hand, East; and the left hand, West.

In a map of the world, longitude is marked on the Equator, and latitude on the circles that contain the two hemispheres. In maps of parts of the earth's surface, longitude is marked at the top and bottom, and latitude on the sides. If the degrees of longitude increase to the right, it is *East* Longitude; if they increase to the left, it is *West* Longitude; if the degrees of latitude increase upwards, it is *North* Latitude; if they increase downwards, it is *South* Latitude.

EXERCISES.—Where is the earth's greatest circumference? What is the distance from the Equator to either Pole? How far does the Ecliptic reach on each side of the Equator? How many degrees are in each Sign of the Zodiac? Where is a degree of longitude longest? Where shortest? And why? What is the breadth of each of the Zones in degrees? In miles? Give the distance in miles of the Tropics and Polar Circles from the Equator, from the Poles, and from each other. When have we the longest day, and when the longest night? And why? In what direction is the sun at noon to the inhabitants of the N. Temperate and N. Frigid Zones? And in what direction to those of the S. Temperate and S. Frigid Zones? Explain its position at noon in the Torrid Zone.

II.—PHYSICAL GEOGRAPHY.

NATURAL DIVISIONS OF THE EARTH'S SURFACE

LAND.

A **Continent** is a large continuous extent of land, comprising several countries.

An **Island** is a smaller portion of land than a continent, and is wholly surrounded by water.

An **Archipelago** consists of several groups or clusters of islands.

"The **Archipelago**" is the name applied to the *Sea* between Greece and Asia Minor, and not to the islands contained in it.

A **Peninsula** is land almost wholly surrounded by water.

An **Isthmus** is a narrow neck of land joining two larger portions of land together.

A **Cape** is a point of land stretching out into the water.

A **Cape** is also called a *Promontory*, *Point*, *Head*, *Headland*, *Mull*, *Naze*, or *Ness*.

A **Coast** or **Shore** is the margin of land washed by the sea.

The **Sea-Board** is the strip of country bordering on the sea.

A **Mountain** is a mass of land raised considerably above the surrounding surface.

A **Hill** is a lower elevation than a Mountain.

A **Mountain Chain**, or **Range**, is a continuous line of Mountain heights.

A **Group of Mountains** consists of a number of heights or ranges, more or less connected.

A **Mountain System** consists of a series of Mountain Chains or Groups.

A **Volcano** is a Mountain which casts forth smoke, flames, ashes, lava, &c.

A **Valley** is a hollow or low land lying between Mountains or Hills.

A **Plain** is a flat extent of land not much raised above the level of the ocean.

A **Plateau** or **Table-Land** is a plain considerably elevated above the level of the ocean.

A series of Plains at different levels are named **Terraces**.

Plains have received specific names in different parts of the world; as, **Prairies** and **Savannas**, in North America; **Pampas**, **Llanos**, and **Selvas**, in South America; **Steppes**, in the south-east of Europe and the north of Asia.

WATER.

The **Ocean** or the **Sea** is the general name applied to the great continuous expanse of salt water which surrounds the globe.

An **Ocean** is one of the five large divisions of the waters of the globe.

A **Sea** is a smaller body of salt water than an ocean, and more or less detached from it.

Inlet is the general name for all openings or indentations of the sea-coast.

A **Gulf** is a portion of water running into the land, and having a narrow opening.

A **Bay** is a portion of water running into the land, but having a wider opening than a gulf.

The terms *Gulf* and *Bay* are frequently misapplied—the one being used for the other.

Roads or **Roadstead** is a place where ships may be moored at some distance from the land.

A **Harbour** or **Haven** is an inlet where ships may be moored and obtain shelter.

A **Strait** or **Sound** is a narrow passage of water uniting two larger portions of water.

A **Channel** is a wider passage than a Strait.

A **Bank** is elevated ground at the bottom of the sea, and rising to near the surface.

Banks are also termed Flats, Shoals, Shelves, or Shallows; if at the surface, they are termed Reefs; if above the surface, they would form islands.

A **Lake** is a body of water surrounded by land.

A **Lagoon** is a shallow lake formed on low lands by the overflow of rivers or the sea.

A **River** is a considerable stream of fresh water running through the land into the sea, a lake, or another river.

A **Rivulet** or **Brook** is a small stream of water.

A **Tributary** or **Affluent** is a river that falls into another river.

The **Confluence** is the point where two rivers meet.

The **Source** of a river is the place where it rises.

The **Mouth** of a river is the place where it empties itself.

An **Estuary** or **Firth** is the mouth of a river widening into an arm of the sea.

The **Banks** are the portions of land bordering on each side of a river. The right and left banks are those to the right and left of a person looking down the river.

The **Bed** of a river is the channel which contains its waters.

The **Basin** of a river is that portion of country which is drained by the river and all its tributaries.

A **Watershed** is the ridge or elevated land which separates one river-basin from another.

A **River-System** consists of all the river-basins inclined to any particular sea or ocean.



DELTA OF THE NILE.

A Delta is a low tract of alluvial land deposited at the mouths of certain rivers, and dividing them into two or more streams; so called from its resemblance to the Greek letter Δ , named "delta."

EXERCISES.—Which natural divisions of the land have divisions of the water corresponding to them? Which divisions of the land are formed from their connection with the water? And which divisions of the water are formed from their connection with the land? Which divisions are often confounded with each other? Give examples from the map.

LAND AND WATER.

The entire area of the globe is nearly 197 millions of square miles. Of this 145 millions are water, and 52 millions land; or about $\frac{3}{4}$ water, and $\frac{1}{4}$ land. The land of the Eastern Hemisphere is $2\frac{1}{2}$ times that of the Western, while the land of the Northern Hemisphere is about three times that of the Southern. If we compare the different Zones, we find the land most largely developed in the North Temperate Zone,—forming more than $\frac{1}{2}$ of the whole area; while the land of the Torrid Zone forms no more than $\frac{1}{8}$.

GREAT DIVISIONS OF THE LAND.

EASTERN CONTINENT, or Old World.

Europe, in the North-West.

Asia, East of Europe.

Africa, South of Europe.

WESTERN CONTINENT, or New World.

North America, in the North.

South America, S.E. of N. Am.

Oceania, E. of the Old World,
and W. of the New.

There are, properly speaking, only two Continents, the Old World, and the New; but, on account of their size, Europe, Asia, Africa, N. America, S. America, and sometimes also Australia, are styled Continents.

DIMENSIONS OF THE CONTINENTS, (INCLUDING ISLANDS.)

	Greatest Length.	Greatest Breadth.	Area in Sq. Miles.*	Comparative Size.
Europe,	3,400 M.	2,450 M.	3,800,000	1†
Asia,	6,700 "	5,400 "	17,000,000	4½
Africa,	5,000 "	4,600 "	12,000,000	3½
(OLD WORLD),	...	...	(32,800,000)	...
N. America,	5,600 "	3,120 "	8,500,000	2½
S. America,	4,500 "	3,000 "	7,000,000	2
(NEW WORLD),	...	...	(15,500,000)	...
Oceania,	10,000 "	5,000 "	4,500,000	1½
Australia,	2,500 "	2,000 "	3,000,000	¾

* The areas are given in round numbers.

† Take Europe as the standard of comparison.

Horizontal Configuration of the Land.—(1.) Whilst the mass of the land in the Northern Hemisphere lies, for the most part, parallel with the Equator, it sends three great prolongations to the south, viz.:—South America, Africa, and Australasia—considering the last as a continuation of Asia, partly submarine.

(2.) All the great divisions of the land extend in broad, compact masses in the north, but taper gradually to the south.

(3.) The leading peninsulas, with a few exceptions, run to the south.

(4.) Most of the peninsulas have an island, or a group of islands, near their extremities.

(5.) The three great peninsulas of Southern Europe bear a general resemblance to those of Southern Asia.

(6.) Nearly the same meridians cut the extreme north and the extreme south points of the great continents.

(7.) Africa and South America have a very striking similarity in their position and outline.

(8.) While the northern continents are penetrated by numerous gulfs, bays, and inland seas, the southern continents, viz.:—South America, Africa, and Australia, present each a solid compact mass.

TABLE OF COAST-LINES.

	Miles of Coast-Line.	Sq. Miles for 1 Mile of Coast.	Comparative Length of Coast.
Europe,	17,000	225	1*
Asia,	35,000	486	$\frac{1}{2}$
Africa,	16,000	750	$\frac{1}{3}$
N. America,	24,000	354	$\frac{2}{3}$
S. America,	13,600	515	$\frac{1}{4}$
Australia,	7,600	395	$\frac{1}{5}$

Of all the continents Europe has comparatively the greatest extent of coast-line; it is therefore the most accessible, and consequently the most favourably situated for commerce. North America comes next, and Africa last.

Islands.—Islands differ from continents only in respect to size, but taken together, they form no more than about $\frac{1}{20}$ of the whole land surface of the globe.

Islands are of two classes,—Continental and Oceanic.

The **Continental Islands** are of the larger size, and nearly all contiguous to the continents to which, in their geological structure and the direction of their mountain system, they bear a close relationship.

The **Oceanic Islands** are of smaller size, either solitary or in groups, dispersed in general over the oceans, and at great distances from the mainland. They are either of volcanic or coralline formation.

* Take Europe as the standard of comparison.

EXERCISES.—Along what parallel is the greatest extension of the land? With what parallel do the northern shores of the great continents most nearly coincide? Name the chief peninsulas that do not run south. Name islands near the extremities of peninsulas. Name the peninsulas of Europe and Asia that have a general resemblance to each other. What are the extreme north and extreme south points of the great continents? And what meridians most nearly cut them? Arrange the continents in the order of comparative size and extent of coast-line. Which great division of the world is composed of islands? Name some of the largest islands and the most important groups. Point out continental and oceanic islands.

GREAT DIVISIONS OF THE WATER.

Although the waters which surround the globe form but one continuous expanse, having no detached portions like the land, they have been, for convenience' sake, divided into Five Great Basins, called Oceans, viz.:—

Atlantic Ocean, W. of the Old World, and E. of the New.	Indian Ocean, S. of Asia, and bet. Africa and Australia.
Pacific Ocean, W. of the New World, and E. of Asia and Australia.	Arctic or Northern Ocean, round the North Pole.
	Antarctic or Southern Ocean, round the South Pole.

TABLE OF DIMENSIONS OF THE OCEANS.

	Greatest Length.	Greatest Breadth.	Areas.
Pacific,	9,000 Miles.	12,000 Miles.	72,000,000 Sq. M.
Atlantic,	9,000 "	4,100 "	35,000,000 "
Indian Ocean, ..	4,500 "	4,500 "	25,000,000 "
Arctic,	2,400 "	2,400 "	5,000,000 " ?
Antarctic,	3,266½ "	3,266½ "	?

CONFIGURATION AND CHARACTERISTICS OF THE OCEANS.

The Pacific presents the appearance of a rude oval, but open on the south, where it merges into the Southern Ocean. Its eastern shore presents the most extended line of unbroken coast in the world; but on the Asiatic shore it is distinguished by five large land-locked seas. Its most distinctive feature, however, is the numberless islands that stud its broad expanse.

The Indian Ocean assumes the form of an immense gulf cut off from the Pacific by Australasia, with India cleaving its northern waters into the Bay of Bengal and the Arabian Sea.

The Atlantic Ocean extends like a winding channel between the Old World and the New, opening freely at both ends into the Northern and Southern Oceans. It is distinguished by the indentations of the shores of its northern basin, whilst those of the southern are close and unbroken. It is also remarkable for the number of its inland and land-locked seas. It is the most

frequented of all the oceans, and has become the greatest highway of commerce.

The Arctic and Antarctic Oceans, being so much ice-locked, are in a great measure unknown, having hitherto resisted all attempts to penetrate to either Pole. The Arctic Ocean is almost land-locked and nearly circular. A famous route through it, between the Atlantic and Pacific, known as the North-West Passage, was long sought for; but although at last explored, it is of no practical value, being closely shut up by ice. The neighbourhood of the North Pole is generally supposed to be open sea.

The Antarctic Ocean, bounded by the Antarctic Circle, is still more dreary, boisterous, and inaccessible than the Arctic, and it sends its icebergs ten degrees nearer the Equator. Victoria Land, the most southern land known, is supposed to be a portion of an Antarctic continent.

EXERCISES.—What are the relative proportions of the oceans? Name the openings on the American shore of the Pacific; also the land-locked seas on its western shores, with the islands and peninsulas that shut them in. Name the inland and land-locked seas connected with the Atlantic; also the islands and peninsulas that shut them in. Name those on opposite sides of the Atlantic that most nearly correspond with each other. Name two inland seas connected with the Indian Ocean. What large islands are in the Arctic Ocean? Where are there many small ones in it? Point out and name its openings into other oceans.

VERTICAL CONFIGURATION OF THE LAND.

Laws of Vertical Arrangement.—(1.) The continents rise gradually from the shores of the ocean into the interior to some line or ridge of greatest elevation.

(2.) This line of greatest elevation is placed, not in the centre, but nearer to one side of the continents.

In the Old World, the long slope is to the north; in the New World, to the east.

(3.) The greatest elevations are in the south of the continents, —there being a gradual rise from the Arctic Circle, where the lands are lowest and flattest, on to the tropical regions.

The culminating or highest point of the Old World (Mount Everest) is situated near the Tropic of Cancer; whilst that of the New World (Aconcagua, in Chili) is not far south of the Tropic of Capricorn.

(4.) The grand linear elevations, or mountain chains, extend in the line of the greatest length of the continents.

An almost unbroken series of mountain chains may be traced around the globe,—from the south-west corner of Europe north-eastwards to Behring's Straits, then south through the Americas to Cape Horn.

Mountain Chains.—The most common arrangement of mountains is in the form of chains, frequently consisting of several parallel ridges, the centre one being the highest. These chains generally reach their highest elevation near the middle, and towards their extremities droop gradually down into the plain. They have in general very steep declivities on the one side, and very gradual slopes on the other; the latter is called the slope, the former, the counter-slope. Single or isolated mountains are chiefly heights of volcanic origin.

Heights of Mountains.—Although the highest mountain of the globe is 29,002 feet, or very nearly $5\frac{1}{2}$ miles in height, it is only $\frac{1}{1250}$ of the earth's diameter; that is to say, it would be correctly represented by a grain of sand, $\frac{1}{125}$ of an inch in thickness, laid upon the surface of an artificial globe 18 inches in diameter.

Table-Lands or Plateaux.—The greatest mass of elevated land does not consist of mountains, but is spread out in extensive upland plains, called *plateaux* or *table-lands*. These *plateaux* are not necessarily flat, but may be varied by hill and dale, lake and river. They are frequently supported round their margins by mountain ridges, whose abrupt descent to the plains below imparts that table-like form whence they have derived the name of *table-lands*. Central Asia, South-Western Asia, and South Africa, are immense *plateaux*.

Plains.—That great zone of high land which extends from the Atlantic to the Pacific divides the Old World into two very different regions. That to the south is, with isolated exceptions, high and mountainous; that to the north forms the Great Northern Plain which stretches from the North Sea eastwards to Behring's Straits, interrupted, and that only partially, by the transverse range of the Urals. It extends over 190° of longitude, and includes an area of nearly 6 millions of square miles; that is, $\frac{1}{3}$ larger than Europe, or $\frac{1}{3}$ of both Europe and Asia.

In the New World, a great Central Plain may be said to extend from the Arctic Ocean to Tierra del Fuego, a distance of more than 9000 miles, although broken by the Gulf of Mexico and the Caribbean Sea. In North America it is contained on the west and east by the Rocky Mountains and the Alleghanies, and in South America by the Andes and the Cordilleras of Brazil.

In the Old World mountains and *plateaux* predominate— $\frac{5}{7}$ of Asia, and $\frac{1}{4}$ of Europe being thus occupied. The New World, on the contrary, is the world of plains, which form $\frac{2}{3}$ of its surface.

MEAN ELEVATION OF THE CONTINENTS.

Europe,	-	-	670 feet.	South America,	-	1130 feet.
North America,	-	750	„	Asia,	-	1150 „
Africa,	-	-	900 „	Whole World,	-	1000 „

Volcanoes.—Volcanic mountains are generally of large size, and of a conical form, with a cauldron-like hollow at the top, termed the *crater*. They are either continuously active, intermittent, or extinct, the second class being the most numerous. By far the greater number are found in islands or mountain chains near the sea-coast. Of the active volcanoes (270 in number) no less than 190 belong to the islands and shores of the Pacific.

Earthquakes are intimately connected with volcanoes, but the most violent convulsions generally happen remote from volcanic centres. The great Earthquake Districts are those of the

Mediterranean Basin, Central Asia, Iceland, and America. The first two are connected, and extend from the Azores to Lake Baikal. The American District lies chiefly on the west coast, along the line of the Andes; but it also extends along the north coast of South America, and into the West Indian Islands.

EXERCISE.—Trace the great series of mountain chains that surround the globe, naming the principal chains. Point out other chains running along the greatest length of continents, islands, or peninsulas.

THE WATERS OF THE LAND.

Rivers.—Rivers are either Oceanic or Continental.

Oceanic Rivers are those which flow into the ocean, either directly or indirectly. About 440 considerable rivers of this class are found in the Old World, and about 140 in the New; but many of the latter are of greater length and volume. The chief slopes in both worlds are towards the Arctic and Atlantic Basins, while the Pacific, though the largest ocean, receives but few rivers. Nearly all the large rivers of the world are in the Northern Hemisphere; and the most important rivers have an easterly course.

Continental Rivers are those which do not reach the ocean, but are confined to the continent, discharging their waters into inland lakes with no outlet, or losing themselves, through evaporation, in sands or marshes. In the Old World is an extensive Basin of Continental Rivers, 3,000,000 square miles in area, extending from near the Baltic and Black Seas through the whole of Inner Asia eastwards to near the Yellow Sea in the Pacific. The other Continental Basins are of comparatively limited extent.

Rivers irrigate as well as drain the soil, and they form ready and effective means of intercourse. The banks of rivers are the sites of most of the great cities of the world; and the seats of commercial and manufacturing industry are almost invariably grouped along their course.

Lakes.—Lakes are found in all regions, but more abundantly in mountain regions, or on the lower reaches of great plains. The highland lakes are frequently distinguished for their picturesque scenery; the lowland lakes are in general tame and unattractive. From the limited evaporation, lakes are most numerous in high latitudes: hence their frequency and magnitude in the North of Europe, Asia, and America. On the other hand, in the plains of South America, Africa, and Australia, many lakes of large area disappear wholly or partially in the periods of drought. North America excels every other continent in the number and magnitude of its lakes.

Classification of Lakes.—Lakes are divided into four kinds:—

- (1.) Those which both receive and give out waters;
- (2.) Those which receive, but do not give out waters;
- (3.) Those which give out, but do not receive waters;
- (4.) Those which neither receive nor give out waters.

The first class are the ordinary ones, being either mere expansions of a river in its course, or the receptacle of its head-waters.

The second class are those which receive *continental* rivers. The waste of

water by evaporation is supposed to equal the quantity supplied by their feeders; and their waters are almost invariably salt or brackish.

The third class are fed by springs from the bottom and margins, and by rain.

The fourth class are also fed by subterranean springs and rain; and evaporation prevents such an accumulation of waters as would overflow their basins, and thus form rivers.

EXERCISES.—Which ocean receives no rivers? Name some large rivers in the Southern Hemisphere. Which river-basin belongs to both Hemispheres? Name some large rivers with a westerly course. Point out some of the minor Continental Basins. Point out the principal water-sheds of the Continents. Name those that are highland and those that are lowland. Point out as many deltas and as many estuaries as you can. Give examples of the first and second classes of lakes.

THE WATERS OF THE OCEAN.

Depth.—The bed of the ocean, like the surface of the dry land, presents great inequalities—being diversified by plains and plateaux, mountains and valleys. As a general law, low lands are bordered by shallow seas, and high lands by deep water. The mean depth of the ocean has been estimated at about 4 miles, and the extreme depth at more than 9. The Atlantic, from 3 to 5 miles, is deeper than the Pacific; the Indian and Southern Oceans are from 4 to 6 miles; and the Arctic is the shallowest.

Tides.—The tides are a periodic rising and falling of the waters of the ocean, caused by the attraction of the sun and moon, but chiefly of the latter, on account of its greater proximity.

When the sun and moon are in conjunction, that is, at new and at full moon, the united attractions cause the highest or *spring-tides*; but when the moon is in opposition, that is, in her first and last quarters, the sun's attraction acts at right angles to that of the moon, and produces the lowest or *neap-tides*.



THE SUN AND MOON IN CONJUNCTION, PRODUCING SPRING-TIDES.



THE SUN AND MOON IN OPPOSITION, CAUSING NEAP-TIDES.

Currents.—The ocean currents are due primarily to the unequal temperatures and densities of the waters, and secondarily to the rotation of the earth and the trade-winds.

General law of the directions of Ocean Currents:—

- (1.) Within the Tropics, they flow westwards.
- (2.) In the Temperate Zones, they flow eastwards.
- (3.) In high latitudes, they flow from the Poles to the Equator.

The Gulf Stream.—The most remarkable of all the oceanic currents is the Gulf Stream, so called from its origin in the Gulf of Mexico. Thence it flows north-east till it reaches the Great Bank of Newfoundland, when it spreads out across the Atlantic, part of its waters turning southwards by the Azores, again to join the Equatorial Current, and form the Sargasso or Grassy Sea; but the greater part, proceeding north-east, bathes the shores of North-West Europe, and ultimately loses itself in the Arctic Ocean. From the Gulf of Mexico to the Azores it is 8000 miles long, and 120 at its greatest breadth. Its speed is at first about 4 miles an hour, and its temperature is from 9° to 30° higher than that of the neighbouring waters. It is a great dispenser of heat and moisture in its course.

EXERCISE.—Name seas and oceans which, according to the general law, you would expect to be deep, and which you would expect to be shallow. Which other motion have the waters of the sea besides tides and currents?

THE ATMOSPHERE.

Winds are of three kinds:—Constant, Periodical, and Variable.

Constant Winds.—(1.) Trade-Winds are the most remarkable of the constant winds. They are so named from their favourable influence upon *trade* and commerce as affected by navigation. They prevail within the Torrid Zone and a few degrees beyond it, but only over the oceans, and never within 100 miles of land. North of the Equator, they blow from the north-east; south of the Equator, from the south-east.

(2.) Polar Winds are constantly blowing within the Polar regions north and south from either Pole.

The Periodical Winds are Monsoons and Land and Sea Breezes.

(1.) Monsoons, or "season winds," are so called because they change their course with the seasons,—blowing from one quarter for one-half the year, and from the opposite quarter for the other half. They prevail chiefly in the northern part of the Indian Ocean.

(2.) Land and Sea Breezes prevail on almost every sea-board, but most notably in tropical countries. The land-breeze sets in during the night, and the sea-breeze during the day. These winds are caused by the unequal temperature of sea and land by night and by day.

Variable Winds.—South-West Winds are the prevailing winds in the higher latitudes of the Northern Hemisphere, and North-West Winds in corresponding regions of the Southern Hemisphere.

Calms.—There are three Zones or belts of Calms,—viz., the Equatorial Calms, the Calms of Cancer, and the Calms of Capricorn. The Calms are confined to the oceans, and fluctuate north and south with the seasons.

CLIMATE.

Under the term **CLIMATE** are included all the combined elements that affect the weather of any district; and the principal of these are **temperature** and **moisture**.

Temperature.—There are two great causes similarly affecting temperature,—viz.,

- (1.) Latitude, or Distance from the Equator; and,
- (2.) Altitude, or Height above the level of the sea.

It is, therefore, nearly the same whether we proceed from the Equator to the Poles, or ascend vertically into the atmosphere: as, for example, in climbing a lofty mountain. In both cases we reach at last the region of perpetual snow—at the sea-level at the Poles, at the height of 16,000 feet at the Equator.

Continental and Maritime Climate.—The ocean radiating its warmth much more slowly than the land, preserves a much more equal temperature, and thus tends to equalize that of the land: hence islands and sea-boards possess a more equable climate than the interior of continents—less cold in winter, and less hot in summer. The former are said to have a maritime or insular climate, the latter a continental one.

Distribution of Heat.—The Southern Hemisphere is, on an average, $3\frac{1}{2}^{\circ}$ colder than the Northern Hemisphere. In the Northern Hemisphere the western coasts are warm, and the eastern cold; in the Southern the eastern are warm, and the western cold. The coldest region of the world is in Siberia—to the north-east of Lake Baikal; the hottest, on both sides of the Red Sea.

Distribution of Rains:—

- (1.) The rainfall is more frequent but less abundant in the Temperate Zones.
- (2.) It is half as much again in the Northern as in the Southern Hemisphere.
- (3.) It is most plentiful near the coast, and decreases towards the interior.
- (4.) It is most abundant in mountainous countries.
- (5.) It is most scanty in lofty plateaux.
- (6.) In the Temperate Zones, the western coasts are the moister, from their exposure to westerly winds from the ocean; but in the Torrid Zone the eastern are the moister, from their exposure to the Trade-Winds.

Rains, like winds, are Periodical, Variable, and Constant.

Periodical Rains occur within the Tropics, where the year is divided into two seasons—the rainy and the dry. The rains follow the apparent course of the sun, prevailing north or south of the Equator according as the sun is vertical in these regions.

India and other countries around the Indian Ocean have their seasons regulated, not by the course of the sun, but by the monsoons.

Variable Rains are extra-tropical. They occur throughout the whole year in the Temperate Zones; but, on the whole, to the north of the Tropics, most abundantly in winter.

Constant Rains prevail in the Zone of Equatorial Calms, accompanied with frequent thunder-storms of great violence.

Countries remarkable for their heavy and continuous rains:—

New World.—Brazil, Guiana, West Indies, Central America, and the Shores of the Gulf of Mexico.

Old World.—Guinea, Senegambia, Eastern Africa, India, and East Indies.

Rainless Regions in the Northern Hemisphere form an immense belt around the Globe, along or near the Northern Tropic, interrupted only at the junction of the Himalaya and Hindoo Koosh Mountains. They measure in all $5\frac{1}{2}$ million square miles.

Rainless Regions of the Globe:—

New World.—Plateau of Mexico, with parts of Guatemala and California, and the coasts of Peru and Bolivia.

Old World.—Sahara, Egypt, Arabia, Persia, Beloochistan, Desert of Gobi or Shamo, and the Table-land of Tibet and Mongolia.

The snow-limit is the line on the equatorial side of which snow never falls at the level of the sea. It lies about 30° North Latitude and 40° South Latitude; and within these limits snow falls only during winter, but it increases in frequency and amount with increase of latitude or elevation above the sea.

The snow-line is the lower edge of the region of perpetual snow.

EXERCISE.—Give examples of countries with insular or maritime climate, and of others with continental climate. Whether should Edinburgh or Moscow, both in the same latitude, be the colder? and why? State the distribution of heat according to Zones, (see page 11.) Should Britain or British America be the moister? and why? Name the countries with no snow-fall at the sea-level. What are the chief agents in the production and distribution of rain?

DISTRIBUTION OF PLANTS.

The elements of light, heat, and moisture being in greatest intensity within the Tropics, there we find the greatest development of vegetable life; while a gradual declension takes place towards either Pole.

TORRID ZONE.—Intertropical vegetation is the most varied and luxuriant: the trees are evergreens, lofty and huge, with large bright leaves and splendid flowers, and are matted over with gigantic climbers and parasites, so dense as to make the forest impenetrable. Aromatic shrubs abound, while reeds rise to the height of 100 feet, and rigid grasses to 40. To this region belong the palm, the loftiest of trees; the baobab, the thickest; and the banyan, the shadiest.

TEMPERATE ZONES.—In the temperate regions more hardy forms and families appear: deciduous trees, (oak, ash, elm, &c.,) vivid green meadows, with tender herbs, the vine, and cereal grasses. With increase of latitude succeed dark forests of fir and pine, which also, in their turn, gradually disappear.

FRIGID ZONES.—The trees are dwarfed by the cold into mere shrubs, and the degeneration of vegetable life continues till lichens and mosses, its lowest forms, are reached in the Regions of the Poles.

DISTRIBUTION OF ANIMALS.

Within the Tropics animal life is most exuberant in point of size, numbers, strength, and beauty; the Temperate Zones excel, in these respects, the Arctic and Antarctic, except in the case of marine animals and sea-fowl, which are most abundant in the Polar Regions.

The TORRID ZONE is the abode of the larger carnivora, (as the lion, tiger, &c.;) the elephant, rhinoceros, hippopotamus; the crocodile, turtle, boa, and the larger reptiles; the ostrich, flamingo, peacock, parrot, humming-bird, and others of brilliant and varied plumage; the giraffe and zebra, apes and monkeys; while insect life is most exuberant, brilliant, and varied.

The TEMPERATE ZONES are the head-quarters of the ox, bison, buffalo, goat, sheep, deer, camel, and other ruminants; the wild boar, wolf, fox, and beaver; the eagle, turkey, goose, grouse, pheasant, &c.

The ARCTIC fauna (or animal life) has few species but many individuals, with a less varied and more sombre colouring. The reindeer, musk-ox, brown and polar bears, Arctic fox, and numerous fur-bearing animals, are peculiar to the Arctic Zone. The whale, the walrus, and the seal, along with countless multitudes of sea-fowl, frequent its waters, but reptile life is unknown.

Each quarter of the world has some one class of animals predominant: Europe and Asia have the ruminantia, (or those that *chew the cud*;) Africa, land-tortoises; America, birds of passage; Australia, the marsupialia, (or *pouched* animals.)

MAN.

Though all of one species, mankind consists of many varieties, differing chiefly in complexion, feature, form of skull, hair, &c., but also in civilization, language, and religion. Man is the only animal capable of living in all climates. The following are the chief varieties:—

I. CAUCASIAN RACE.—Characteristics—Fair complexion, flowing hair, ample beard, oval head, regular features.

Distribution.—This race is dispersed over the south-west of Asia, the north and north-east of Africa, and nearly all Europe. It has also extended largely from Europe over North and South America, South Africa, Australia, and New Zealand.

II. MONGOLIAN RACE.—Characteristics—Complexion tawny or olive-yellow, hair coarse and straight, beard scanty, head square-shaped, face broad and flat, cheek-bones high, and small black eyes obliquely set.

Distribution.—This race extends over all Central and Eastern Asia, and the whole Arctic sea-board of both the Old World and the New.

III. NEGRO or ETHIOPIAN RACE.—Characteristics—Skin black, hair short and woolly, skull narrow, forehead slanting, cheek-bones high, nose broad and flat, thick lips and projecting jaws.

Distribution.—This race occupies the whole of Africa south of the Great Desert, except the Hottentots and Caffres in the South, who are not true Negroes.

MINOR VARIETIES.—1. The **Malays**, in Oceania, subdivided into—**Malays** proper, of a brown colour, in Malaysia and Polynesia; and **Papuan Negroes**, of a dark colour, in Australia and New Guinea.

2. **American or Red Indians**, the aborigines of North and South America, copper-coloured, with hair lank and black, aquiline nose, and tall slender figure.

The Caucasian Race is the most civilized, and the Negro is the lowest of the three great races.



1. Caucasian.



2. Mongolian.



3. Negro (pure type).



4. Malayan.



5. Otto Indian of North America.

RACES OF MANKIND.

POPULATION OF THE GLOBE.

		Average per Sq. Mile.
Europe,	282,000,000,	73 persons.
Asia,	711,000,000,	40 "
Africa,	130,000,000,	11 "
North America,	50,000,000,	6 "
South America,	22,000,000,	3·5 "
Oceania,	20,000,000,	4·5 "
Total,	<u>1,215,000,000</u>	

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1. Caucasian.



2. Mongolian.



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5. Otto Indian of North America.

RACES OF MANKIND.

POPULATION OF THE GLOBE.

			Average per Sq. Mile.
Europe,	282,000,000,	. . . . .	73 persons.
Asia,	711,000,000,	. . . . .	40 "
Africa,	130,000,000,	11 "
North America,	50,000,000,	6 "
South America,	22,000,000,	3·5 "
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Total,	<u>1,215,000,000</u>		

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RACES OF MANKIND.

POPULATION OF THE GLOBE.

			Average per Sq. Mile.
Europe,	282,000,000,	73 persons.
Asia,	711,000,000,	. . . . .	40 "
Africa,	130,000,000,	. . . . .	11 "
North America,	50,000,000,	. . . . .	6 "
South America,	22,000,000,	. . . . .	3.5 "
Oceania,	20,000,000,	. . . . .	4.5 "
Total,	<u>1,215,000,000</u>		

EXERCISE.—Draw a sketch map of the world shewing the Distribution of the Plants and Animals mentioned above. Name some of the 'cereal grasses.' Name as many 'deciduous trees' as you can. Which three animals of the Arctic Zone most nearly resemble three of the Torrid Zone? Name an animal of the Torrid Zone now common in this country. Name as many of the 'ruminantia,' 'fur-bearing animals,' and 'marsupialia,' as you can. Assign, if you can, a reason for man's capability of living in all climates. Draw a map of the world shewing the Distribution of the Races of Mankind.

III.—POLITICAL GEOGRAPHY

POLITICAL DIVISIONS OF THE EARTH.

The Political Divisions of the Earth, or States, are Empires, Kingdoms, Republics, Principalities, Duchies, Colonies, &c.

An Empire consists of several countries or states united under one monarch, usually styled Emperor.

A Kingdom is a country governed by a King or Queen.

A Republic is a country governed by rulers chosen by the people of the country; the chief ruler being usually styled President.

A Principality is ruled by a Prince; a Duchy by a Duke.

A Colony is a country held in dependence by another country, by whose inhabitants it is in the course of being settled.

Countries or States are, for convenience in government, variously subdivided into Provinces, Cantons, Departments, Counties or Shires, &c.

The Capital or Metropolis of a country is the city which forms the seat of government.

A County Town is a town appointed in each county or shire for the transaction of county business.

FORMS OF GOVERNMENT.

A Monarchy is that form of government in which the supreme power is vested in one permanent ruler or monarch, such as an Emperor or a King.

An Absolute Monarchy, or a Despotism, is one in which the monarch possesses absolute or uncontrolled authority.

A Limited or Constitutional Monarchy is one in which the power of the monarch is more or less under the control of his subjects.

A Democracy is that form of government in which the supreme power is vested in the people, as in a republic.

A Federal Union or Confederation is a union of several independent states for the purpose of better securing common interests; each state managing its own internal affairs independently of the others.

Republics are most common in America; Limited Monarchies in Europe; Despotisms in Asia, Africa, and Oceania—the last two divisions of the globe being chiefly ruled by petty despots.

LANGUAGES.

The languages of the globe have been estimated at about 4000. Their classification corresponds generally with that of the races of mankind.

I. The Indo-European Languages, prevailing from the East Indies, westwards through Asia and Europe, to the Atlantic.

II. The Semitic Languages, nearly all extinct, except Arabic, spoken in Arabia, and also largely in North and North-East Africa.

III. The Tartar or Turanian Languages, in Central and Northern Asia.

IV. The Monosyllabic Languages, in China, Japan, Indo-China, and Tibet.

V. The Malay Languages, in Oceania.

VI. The African Languages, including all the African dialects except Arabic.

VII. The American Languages, spoken by the American Indians.

RELIGIONS.

The religions of the world may be divided into two great classes:

I. MONOTHEISM, or the worship of the one true God; and

II. POLYTHEISM, or the worship of many gods.

MONOTHEISM comprehends Christianity, Judaism, and Mohammedanism.

1. Christianity is the only true form of religion, and consists of—

(1.) The Roman Catholic, or Latin Church, which acknowledges the Pope as supreme head of the Church. It prevails chiefly in Southern Europe, and in Lower Canada, Mexico, and Brazil.

(2.) The Eastern or Greek Church, which differs from the Roman, or Western, chiefly in denying the papal authority. It is professed in Eastern Europe, especially in Greece, Turkey, and Russia.

(3.) Protestantism, which holds the Sacred Scriptures as the only rule of faith and practice. It embraces numerous sects, and prevails chiefly in North-Western Europe, and countries colonized from that part of the world.

2. Judaism, the religion of the Jews, rejects the New Testament Scriptures, and expects a Messiah yet to come.

3. Mohammedanism, the religion of Mohammed, an Arabian impostor, is extensively diffused throughout Arabia, the Turkish Empire, North Africa, South-Western Asia, and India.

POLYTHEISM comprehends Hindooism, or Brahminism, Buddhism, and Fetichism.

1. Hindooism, the religion of the Hindoos of India, recognises one supreme being, with a fabulous multitude of inferior ones. The river Ganges is held sacred.

2. Buddhism accepts, like Hindooism, the doctrine of the

transmigration of souls, and places supreme happiness in final extinction. It prevails over all Asia east of the Ganges and north of the Himalayas—its headquarters being in Tibet, where it is practised under the form of Lamaism.

3. Fetichism, or the worship of inanimate objects and the lower animals, is the lowest form of idolatry. It prevails among the savage tribes of Africa, America, and Polynesia.

The religion of any country which is supported by the state is called the *Established religion*.

SUMMARY OF RELIGIONS.

Roman Catholics,	185,000,000	} Christians, 355,000,000
Protestants,	95,000,000	
Greek Church,	75,000,000	
Jews,		7,000,000
Mohammedans,		120,000,000
Hindoo,	120,000,000	} Heathens, 733,000,000
Buddhists,	400,000,000	
Other Idolaters,	213,000,000	
		<u>1,215,000,000</u>

EXERCISES.—Name, if you can, an Empire, a Kingdom, a Republic, and a Colony. Which two groups of languages are spoken by the Caucasian Race? Which two by the Mongolians? Arrange the religions of the world in the order of the number of their adherents. Which of the races of mankind are Christians? Which Buddhists? Which adherents of Fetichism? Draw map of the world, shewing the Distribution of Religions.

EUROPE.

Boundaries.—N., Arctic Ocean; W., Atlantic Ocean; S., Mediterranean Sea, Sea of Marmora, Black Sea, and Caucasus Mts.; E., Caspian Sea, Ural R., and Ural Mts.

General Aspect.—Europe, in figure, is an immense peninsula projected from Asia. It is remarkable for the great development of secondary peninsulas; for the great number of its inland seas and gulfs; and for the extensive sea-board which it consequently enjoys. In the E. and centre is the Great Plain of Europe, occupying about $\frac{2}{3}$ of the whole surface—broad in the E., but narrowing to the W. To the N. and S. of this Plain are two Highland Regions—the first, Scandinavia and the British Islands; the second, comprising all the southern peninsulas and a large portion of Middle Europe. The Great Watershed of Europe, extending along its greatest length from S.W. to N.E., forms two Great Slopes—viz., N.W. and S.E.—the latter being much the larger.

$\frac{3}{4}$ of Europe are occupied by plains, and $\frac{1}{4}$ by mts. and highlands. Peninsulas form $\frac{1}{4}$, and islands $\frac{1}{20}$. Its E. and W. extremities have a difference of 5 hours in time.

COUNTRIES OF EUROPE.

IN THE NORTH- WEST.	IN THE CENTRE.	IN THE SOUTH.	IN THE EAST.
England. Scotland. Ireland. Norway. Sweden. Denmark.	Holland. Belgium. Germany. Austria. Switzerland. France.	Spain. Portugal. Italy. Turkey. Greece.	Russia.

EXERCISES.—How is Europe separated from Africa and from Asia? How is it joined to Asia? What part of Europe is farthest from the coast? and how far? Give the boundaries, political and natural, of each country. Which country has no sea-board? Which countries are insular? Which peninsular? Which mountainous? Which are in the Great Plain? (see page 32.)

SEAS AND GULFS.

ARCTIC OCEAN.

White Sea, N. of Russia.

ATLANTIC OCEAN.

Baltic Sea, bet. Russia and Sweden, comprehending—

G. of Both'nia, in the N.

G. of Fin'land, in the E.

G. of Ri'ga, in the E.

G. of Dan'zig, in the S.

North Sea, or German Ocean, bet. Great Britain and the Continent, comprehending—

Skag'er Rack, bet. Denmark and Norway.

Cat'tegat, or The Sleeve, bet. Denmark and Sweden.

Zuyder Zee, in the N. of Holland.

Irish Sea, between England and Ireland.

Bay of Bis'cay, West of France.

MEDITERRA'NEAN SEA.

G. of Li'ons, S. of France.

G. of Gen'oa, N.W. of Italy.

G. of Taran'to, S.E. of Italy.

Adriatic Sea, bet. Italy and Turkey.

The Archipel'ago, or Ege'an Sea, bet. Greece and Asia.

Sea of Mar'mora, bet. Turkey and Asia.

Black Sea, S. of Russia.

Sea of Az'ov, N. of Black Sea.

Cas'pian Sea, S.E. of Russia.

The White Sea, so called from the ice and snow which cover it from October to May every year. Baltic Sea, about 4 times the size of Scotland; shallow, tideless, largely frozen during winter, colder and fresher than the ocean. North Sea, shallow in the S., deeper in the N.; in the centre is a large sand-bank, the Dogger Bank, the seat of important fisheries. B. of Bis'cay has heavy seas dangerous to navigation. Mediterranean Sea, area 1,150,000 sq. m., nearly 10 times the size of the British Is., the largest of inland seas; named 'Mediterranean,' or 'Midland,' from its inland position; almost tideless, and saltier than the ocean. Black Sea, or Euxine Sea, oval-shaped, about $5\frac{1}{2}$ times the size of Scotland; so named either from its dense fogs or the dark forests on its shores. Sea of Az'ov, very shallow, shores muddy, waters brackish; its W. part is called the Putrid Sea. The Caspian Sea, $4\frac{1}{2}$ times the size of Scotland, the largest salt lake in the world; its surface 83 feet below sea-level.

ISLANDS.

ARCTIC OCEAN.

No'va Zem'bla, N.E. of Russia.
 Spitzbergen, 400 m. N. of Norway.
 Loffo'den Is., off the N.W. coast of Norway.

ATLANTIC OCEAN.

Ice'land, bet. Norway and Greenland.
 Fa'røe Isles, S.E. of Iceland.
 British Is., bet. the Atlantic and the North Sea.
 Azores, 800 m. W. of Portugal.

BALTIC SEA.

Zea'land, Fu'n'en, and Lea'land, bet. the Cattegat and the Baltic.

Born'holm, O'land, and Goth'land, off the coast of Sweden.
 Oe'sel and Da'go, at the mouth of the G. of Riga.
 A'land Is., at the mouth of the G. of Bothnia.

MEDITERRA'NEAN SEA.

Balear'ic Is., E. of Spain.
 Cor'sica, Sardin'ia, and El'ba, W. of Italy.
 Lip'ari Is., Sic'ily, Mal'ta, and Go'zo, S. of Italy.
 Illy'rian Is., in the E. of the Adriatic.
 Io'nian Is., W. of Greece.
 Can'dia, S.E. of Greece.
 Euboe'a and the Cyc'lades, in the Archipelago.

Nova Zembla, uninhabited; visited in summer for whale fishing. Spitzbergen, the most northerly known land. Loffoden Is., a great fishing station, with a famous whirlpool, called the Mälstrom. Gt. Britain, the largest I. in Europe, and the seventh largest in the world. Azores, or Western Isles, principal island, St. Michael, famous for oranges. Balearic Is., so named because their early inhabitants were skilful *singers*. The Cyc'lades, so named because they are grouped in a circle; the other Is. of the Archipelago are called the Sporades, because they are *scattered*.

PENINSULAS AND ISTHMUSES.

Scandina'via, (Norway and Sweden.)
 Jüt'land, in the N. of Denmark.
 Britt'any, in the W. of France.
 Ibe'rian Peninsula, (Spain and Portugal.)
 Italy.
 Hellen'ic Peninsula, (Turkey and Greece.)

The More'a, in the S. of Greece.
 The Crime'a, in the S. of Russia.

Isth. of Cor'inth, joining the Morea to the N. of Greece.
 Isth. of Per'ekop, joining the Crimea to Russia.

The Iberian Pen. is often styled "The Peninsula." Italy, in shape like a high-heeled boot, has the sub-peninsulas of Otranto and Calabria for heel and instep. Morea, the ancient Peloponnesus.

STRAITS.

ON THE WEST.

The Sound, Gt. Belt, and Little Belt, bet. the Cattegat and the Baltic.
 Str. of Dover and English Channel, bet. the N. Sea and the Atlantic.

North Channel, leading N., and St. George's Channel, leading S. from the Irish Sea.

ON THE SOUTH.

Str. of Gibralt'ar, joining the Mediterranean to the Atlantic.

STRAITS—continued.

Str. of Bonifacio, bet. Corsica and Sardinia.	[Sicily.] Str. of Constantino'ple, joining the Sea of Marmora to the Black Sea.
Str. of Messina, bet. Italy and Str. of Otranto, entrance into the Adriatic.	Str. of Kaffa, or Yenikale', joining the Sea of Azov to the Black Sea.
Str. of the Dardanelles', joining the Sea of Marmora to the Archipelago.	

The Sound, chief entrance into the Baltic, 8 m. wide; about 20,000 vessels pass annually. Str. of Dover, 22 m. wide. Str. of Gibraltar, 50 m. long, and from 13 to 23 wide. Str. of Messina, dreaded in ancient times for the dangerous rock of Scylla, on the Italian side, and the whirlpool of Charybdis, on the Sicilian side, both near the northern entrance. Str. of the Dardanelles, the ancient Hellespont. Str. of Constantinople, also called The Bosphorus, (literally 'ox-ford').

CAPES.

ON THE NORTH.	C. Ortegá and C. Finisterr'e, N.W. of Spain.
Nordkyn, N. of Norway.	C. Bo'ca, or Rock of Lisbon, W. of Portugal.
North Cape, N. of I. of Mageröe.	C. St. Vincent, S.W. of Portugal.
ON THE WEST.	ON THE SOUTH.
The Naze, S. of Norway.	Tarifa Point, S. of Spain.
The Skaw, N. of Denmark.	C. Passaro, S.E. of Sicily.
C. Wrath, N. of Scotland.	C. Spartivento and C. di Leuca, S.E. of Italy.
C. Clear, S.W. of Ireland.	C. Matapan', S. of Greece.
Land's End, S.W. of England.	
C. La Hague, N.W. of France.	
Point Raz, W. of France.	

North Cape is a mass of pyramidal cliffs, 1161 ft. high. Nordkyn is the extreme north point of the mainland of Europe, C. Bo'ca, the most westerly, and Tarifa Point the most southerly.

EXERCISES.—Name all the countries bordering on the Baltic, North Sea, Mediterranean, and Black Sea. Which I. touches the Arctic Circle? Name the largest of the British Is., with three minor groups. Name the three largest of the Balearic Is. Which I. is the southmost of Europe? Name the Is. associated with peninsulas. Which sea is most studded with Is.? Name the seas on opposite sides of the above peninsulas. Which peninsulas extend in unusual directions? Which of them are most sub-divided? Point out on the map of Europe ten other peninsulas. Point out ten other isthmuses. Which isthmuses join Europe to Asia? Draw two lines cutting off all the peninsulas of Europe. Give the land on each side of the above straits. Name the straits a ship would pass through in sailing from the Baltic to the Sea of Azov. Name all capes you would pass in a voyage from the White Sea to the Black Sea, keeping close by the mainland. Draw a sketch map, giving the Outlines of the Coast of Europe.

MOUNTAINS.

SYSTEM.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
NORTH-WEST MOUNTAIN REGION.			
SCANDINAVIAN, {	Kio'len, Dov'refield, & Lang'efield Mts.,	Norway and Sweden, . .	Skag'acloes-tin'den, . 8,670
BRITISH, . .	Gran'ians, &c., .	British and Faröe Is., .	Ben Nevis, 4,400

MOUNTAINS—continued.

SYSTEM.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
SOUTH MOUNTAIN REGION.			
HERSPERIAN, OR SPANISH,	Pyræneæ, and Can-	N. of Spain, .	Mt. Maladet'ta, 11,168
	tabrian Mts., .	S. of Spain, .	Cerro Mulhaç'en, 11,678
	Sier'ra Neva'da, &c.,	Switzerland &	Mont Blanc, . 15,744
	Alps proper, . . .	N. of Italy, .	E. and S.E. of
	Mts. of France, .	France, . .	Mt. Molleson, . 6,588
ALPINE, . . .	Sar'do-Cor'sican Mts.	Sardinia and	Mon'te Roton'do, 9,068
	Ap'ennines, . . .	Corsica, .	Mt. Æt'na, . . 10,874
	Sia'vo-Hellen'ic Mts.,	Italy and Sicily,	
	viz:—		
	Dinar'ic Alps and	Turkey and	Olym'pus, . . 9,749
	Pin'dus, . . .	Greece, . .	
	Bal'kan Mts., &c.,	Turkey, . . .	Tchar-Dagh, . 9,700
	Carpa'thian Mts., .	E. of Austria, .	Mt. Botschet'je, 9,528
	German'ic Mts., .	S. of Germany,	Schnee Kop'pe, 5,255
	&c., . . .	&c., . . .	
ON THE FRONTIERS.			
URA'LIAN, .	U'ral Mts., . . .	E. of Russia, .	Kon'jak-Of'ski, 5,397
CAUCA'SIAN,	Cau'casus Mts., .	S.E. of Russia,	Mt. Elbur'z, . 18,493

VOLCANOES.

Mt. Vesu'vius, in the W. of Italy.

Mt. Æt'na, in the E. of Sicily.

Strombo'li, in the Lipari Is.

Mt. Heo'la, and 7 others, in Iceland.

The Alps, 600 m. in length, consist of many chains and parallel ridges, varying in width from 80 to 200 m.—broadest in the E., but highest in the W. The peaks are needle-shaped, and many of them rise above the snow-line, which is here 8,900 ft. In the Central Alps are 400 glaciers, covering 1,400 sq. m. Mont Blanc ('White Mt.') is visible 150 m. off; from the Vale of Chamouni, at its base, the summit resembles the back of a dromedary. The Urals are rich in minerals. Mt. Elburz ('Snowy Mt.') is 2,749 ft. (more than $\frac{1}{2}$ -mile) higher than Mont Blanc, but the Caucasian range belongs strictly to Asia.

Vesuvius is the only active volcano on the mainland of Europe. In an eruption in A.D. 79 it destroyed the cities of Herculaneum and Pompeii. Æt'na is 87 miles in circumference at the base. Stromboli, in constant activity, is styled "the lighthouse of the Mediterranean." Hecla, in the S. of Iceland, has the Geysers, or Boiling Springs on the N.W.

PLAINS AND PLATEAUX.

Great Plain, in the E. & Centre.

Pl. of Hungary, or Middle Danube.

Pl. of the Lower Danube, in the N. of Turkey.

Pl. of Lombardy, in the N. of Italy.

Plat. of Central Spain.

Plat. of Switzerland, from S.W. to N.E. of Switzerland.

Plat. of Bava'ria, in S. of Germany.

Plat. of Bohe'mia, N.W. of Austria.

Countries in the Great Plain:—Russia, Prussia, Denmark, Holland, and Belgium. Pl. of Lombardy, or Valley of the Po, remarkable for its great fertility. Central Spain is the largest and highest plat. of Europe—area 93,000 sq. m., or 3 times the size of Scotland, and from 2,000 to 3,000 ft. high.

EXERCISES.—Give the direction of each of the chief Mt. ranges. What is the general direction? Name the exceptions. Which Mts. are nearly half-way from the Equator to the N. Pole? Give the locality of each of the highest summits, and the range it belongs to. Arrange these summits in the order of their height, reduce them to miles, and compare them with some height with which you are familiar. Of what plain is the Great Plain a section? How is it detached from it? Where is it connected with it? What are its chief natural boundaries? Which country of N.W. Europe is not mountainous? Draw a sketch map, shewing the chief Mts., Plains, and Plateaux.

RIVERS.

IVER.	Rises in.	Flows.	Through.	Falls into.
I.—NORTH-WEST SLOPE.				
1. THE ARCTIC BASIN.				
Petchora, . .	Ural Mts., . .	N.W., . .	N.E. of Russia, . .	Arctic Ocean.
N. Dwina, . .	Great Plain, . .	N.W., . .	N. of Russia, . . .	White Sea.
2. THE BALTIC BASIN.				
S. Dwina, . .	Valdai Hills, . .	W., . .	W. of Russia, . .	Gulf of Riga.
Nie'men, . .	Great Plain, . .	W., . .	W. of Russia, . .	Curische Hafl.
Vistula, . .	Carpathians, . .	N.W. & N., . .	Poland & E. Prussia, . .	Gulf of Danzig.
Oder,	"	N.W., . .	Prussia,	Stettiner Hafl.
3. NORTH SEA BASIN.				
Elbe,	Bohemia,	N.W., . .	Prussia,	North Sea.
Rhine,	Central Alps, . .	W. N. & W., . .	{ Switzerland, Ger- many, & Holland, }	"
Meuse,	N. of France, . .	N. & W., . .	Belgium & Holland, . .	"
Thames, . . .	W. of England, . .	E., . .	S. of England, . . .	"
4. ATLANTIC BASIN.				
Seine,	E. of France, . .	N.W., . .	N. of France, . . .	English Channel.
Loire,	Cevennes Mts., . .	N. & W., . .	Centre of France, . .	Bay of Biscay.
Garonne, . . .	Pyrenees,	N.W., . .	S.W. of France, . .	"
Douro,	N.E. of Spain, . .	W., { . .	{ N. of Spain and Portugal, }	{ Atlantic.
Tagus,	E. of Spain, . . .	W., . .	Centre of do. . . .	"
Guadiana, . . .	E. of Spain, . . .	W. & S., . .	S. of do. . . .	"
Guadilquivir, . .	{ S.E. of Spain, . .	S.W., . .	S. of Spain,	"
II.—SOUTH-EAST SLOPE.				
1. MEDITERRANEAN BASIN.				
Ebro,	N. of Spain, . . .	S.E., . .	N.E. of Spain, . . .	Medit. Sea.
Rhone,	Central Alps, . .	W. & S., { . .	{ Switzerland and France, }	{ Gulf of Lions.
Po,	Western Alps, . .	E., . .	N. of Italy,	Adriatic Sea.
2. BLACK SEA BASIN.				
Danube,	S.W. of Germany, .	E., S., & E., .	{ Germany, Austria, Turkey, }	{ Black Sea.
Dniester, . . .	Carpathians, . . .	S.E., . .	S.W. of Russia, . .	"
Dnieper,	Centre of Russia, .	S.E., . .	S.W. of Russia, . .	"
Don,	"	S., . .	S. of Russia,	Sea of Azov.
3. CASPIAN BASIN.				
Volga,	Valdai Hills, . .	E. & S., { . .	{ Central and S.E. Russia, }	{ Caspian Sea.
Ural,	Ural Mts.,	S., . .	S.E. of Russia, . . .	"

LARGEST RIVERS.

RIVER.	LENGTH (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
Volga , . . .	2,400	520,000	Rhine , . . .	800	87,000
Danube , . . .	1,725	810,000	Ural , . . .	1,040	85,000
Don , . . .	1,000	205,000	Vistula , . . .	590	76,000
Dnieper , . . .	1,230	200,000	Elbe , . . .	550	57,000
N. Dwina , . . .	700	144,000	Oder , . . .	455	53,000
Petchora , . . .	900	114,000	Loire , . . .	530	45,000
Neva , . . .	47	91,000	Rhone , . . .	645	38,000

Representing the whole river-drainage of Europe by 100, the N.W. Slope would be = 43, the S.E. Slope = 57.

The Volga is the largest river in Europe, the Rhone the most rapid, the Rhine the most picturesque. Most of the rivers are navigable throughout the greater part of their course, and many of them are connected by means of Canals: thus the Caspian and Black Seas are united to the Baltic and White Seas, and the Medit to the Bay of Biscay. The rivers of the Arctic Basin are usually ice-locked from September to June.

LAKES.

SYSTEM.	LAKES.	POSITION.
Northern or Baltic , {	Ladoga, Onega, Peipus, Saima, Enara, &c., . . .	{ N.W. of Russia.
	Wener, Wetter, Mælar, Hielmar, &c., . . .	{ Sweden.
	L. of Geneva, or L. Lemman, Neufchatel, Lucerne, Zurich, Constance, or Boden See, &c., . . .	{ Switzerland.
Southern or Alpine , {	Maggiore, Como, Garda, &c., . . .	{ North of Italy.
	Balaton, or Platten See, Neusiedler See, . . .	{ Hungary.

The Northern Lakes in the countries around the Baltic are the larger and more numerous, but, in general, shallow and dreary; the Southern are smaller, but frequently of great beauty.

Ladoga, the largest lake, (6330 sq. m.) is nearly twice as large as Onega, the next in size; Maggiore is the deepest, Lucerne the most picturesque. Mælar has 1300 islands. Balaton and Neusiedler See are shallow, and have no outlet; the former is brackish, the latter salt.

EXERCISES.—Trace out the Great Watershed of Europe. Point out the watersheds or boundaries of the Seven Great Basins or River-Systems. Which river-sources are near each other? Which four rivers rise in the Alps? Which form estuaries? Which deltas? Which river differs in general direction from the others on the same Great Slope? Arrange the largest rivers in the order of their length, and compare them with the Thames, (250 m.) Compare the river-basins with the area of Scotland, (31,324 sq. m.) Name the mountains with which the lakes are associated. By what rivers do they discharge, and into what seas? Draw a sketch map, shewing the River and Lake Systems of Europe.

OF EUROPE.

COUNTRIES AND CAPITALS, &c.

COUNTRIES.	AREA. Sq. m.	POP. (Millions.)	CAPITALS.	POSITION OF CAP.	POP. OF CAP. (Thous.)	GOV.	RELIGION.
ENGLAND, .	58,320	22½	London, .	R. Thames,	3,250	{ K. M.	Prot.
SCOTLAND, .	31,324	3½	Edinburgh, .	F. of Forth,	196	{ L. M.	R. C.
IRELAND, .	32,512	5½	Dublin, .	R. Liffey,	246	{ K. M.	Prot.
NORWAY, .	122,000	1½	Christiania, .	Christiania B.,	89	{ L. M.	"
SWEDEN, .	172,000	3½	Stockholm, .	L. Mælar,	100	{ K.-L. M.	"
DENMARK, .	14,800	1½	Copenhagen, .	The Sound,	144	{ " "	"
HOLLAND, .	13,600	3½	Amsterdam, .	R. Amstel,	271	{ " "	R. C.
BELGIUM, .	11,400	4½	Brussels, .	R. Senne,	260	{ E.-L. M.	Prot.
GERMANY, .	210,000	40	Berlin, .	R. Spree, .	703	{ E.-A. M.	R. C.
AUSTRIA, .	240,000	34½	Vien'na, .	R. Danube,	579	{ R. Rep.	Pr. & R. C.
SWITZERLAND, .	15,260	2½	Berne, .	R. Aar, .	26	{ " "	R. O.
FRANCE, .	204,000	37	Par'is, .	R. Seine, .	1,700	{ K.-L. M.	"
SPAIN, .	196,000	16	Madrid, .	R. Manzanares, .	475	{ " "	"
PORTUGAL, .	35,000	4	Lis'bon, .	R. Tagus, .	280	{ " "	"
ITALY, .	108,000	24	Rome, .	R. Tyber, .	220	{ E.-A. M.	O. C.
TURKEY, .	210,000	16	Constantinople, .	Bosphorus, .	1,075	{ K.-L. M.	"
GREECE, .	20,150	1½	Ath'ens, .	G. of Eg'ina, .	41	{ " "	"
RUSSIA, .	2,087,000	64	St. Petersburg, .	R. Neva, .	539	{ E.-A. M.	"

EXERCISES.—Arrange these countries and capitals in the order of (a) size and (b) population, and according to form of (a) government and (b) religion. Compare the countries in size and population with Great Britain. Give the countries on the globe on the (a) same latitude and (b) the same longitude as the capital of each of these countries. Give the distances and direction from London of each of the above capitals. Which capitals are most nearly E. and W. of each other? Draw a sketch map of Europe, laying down the above Countries and Capitals.

Climate.—Europe is almost wholly situated in the N. Temperate Zone. From its peninsular character, and the influence of the Gulf Stream, it enjoys a milder climate than the other continents under the same latitudes. The S. is affected by hot winds from Africa, while the N. and E. are exposed to chill blasts from the Arctic Seas and Siberian plains. The prevailing winds are from the W. and S.W.—i. e., from the Atlantic.

PRODUCTIONS. 1. **Minerals.**—In the precious metals and gems Europe is inferior to the other great divisions of the globe, but greatly superior in the abundance and richness of the useful metals. Great Britain is the country richest in mineral produce, especially coal and iron. The chief minerals are thus distributed:—

Gold.—The Urals and Carpathian Mts.

Platinum.—The Urals, Spain.

Silver.—Spain, Austria, Germany, Norway.

Lead.—Gt. Britain, Spain.

Mercury.—Austria, Spain.

Copper.—Brit. Is., Hungary, Ural Mts.

Tin.—England, Austria, Spain.

Coal.—Gt. Britain, Belgium, France, Russia, Germany, Spain.

Iron.—In the same countries as coal; also in Sweden.

Rock Salt.—England, Poland.

Zinc.—England, Belgium, Spain.

2. **Vegetables.**—Over the three southern peninsulas flourish such tropical plants as the olive, orange, lemon, fig, and mulberry, with cork-forests and abundance of evergreens. The best wine districts are S. of 45°. North of the Alps and Pyrenees is the region of rich pastures and corn-fields, with common fruits and deciduous trees. Dwarf firs, willows, and birches, alone pass the Arctic Circle. Of cereals, or grain-plants, seven distinct species are cultivated: rice, maize, and millet, (in Southern Europe,) wheat, oats, barley, and rye, (rye sustaining $\frac{1}{3}$ of the population of Europe.) Hemp and flax are extensively cultivated in the Centre and East. The potato is universal.

3. **Animals.**—Wild animals are scarce in Europe. The white



REINDEER SLEDGE TRAVELLING.

polar bear is limited to the extreme North, and the common brown bear, the wolf, and wild boar, are found in the woody regions of the Alps and Pyrenees, Scandinavia, Russia, and Turkey; the reindeer and elk in the far North; red-deer, fallow-deer, and roebuck in the Centre; the chamois, or wild goat, and ibex on the Alps; the moufflon, or wild sheep, in Corsica and Sardinia; the auroch, or wild ox, in Western Russia; the Barbary ape is confined to the Rock of Gibraltar, the buffalo to the marshes of Italy, and the Bactrian camel to the South-Eastern Steppes.

PEOPLE.—Europe is the most densely-peopled continent—the pop. being densest in Belgium, England, and Holland, and sparsest in Norway, Sweden, and Russia. It is also the most civilized.

Races.—The Caucasian Race (numbering $\frac{9}{10}$ of the whole population) has the following varieties:—

Celtic, in Brittany, Wales, I. of Man, Ireland, Scottish Highlands;

Teutonic, in Scandinavia, Iceland, Germany, Great Britain, Denmark, Holland, &c.;

Slavonic, in Middle Russia, Poland, N. of Turkey, E. of Austria;

Greco-Latins, (a mixed race,) in France, Spain, Portugal, Italy, Greece.

The Mongolian Race has the following varieties in Europe:—

The Finns, Lapps, and Samoides, in the N. of Russia;

The Tartars and Kalmucks in the S. and E. of Russia;

The Turks, in Turkey; and the Magyars, in Hungary.

About 2,000,000 Jews and 600,000 Gipsies are scattered over the continent.

The principal languages of Europe are grouped according to the above four great varieties of the Caucasian stock.

The English is the most diffused over the world; French the most common medium of intercourse between foreigners in Europe; Italian is widely diffused on the eastern shores of the Mediterranean.

Religion.—Christianity prevails under three leading forms:—

Roman Catholicism, in the S. and W., among the Celtic and Greco-Latin races.

Greek Church, in the East, among the Slavonic races;

Protestantism, in the North, among the Teutonic races.

Other religions, non-Christian, are—

Mohammedanism, professed by the Turks; | Heathenism, by the Samoides and Lapps.

Lamaism, by the Kalmucks; | Judaism, by the Jews.

About one-half of Europe is R. C.; the G. C. and Prots. are nearly equal in numbers; while the others amount to about 12 millions.

Gov.—States of the first rank, styled the Five Great Powers, are—Great Britain, France, Germany, Austria, Russia.

Second Rank—Italy, Spain, Turkey, Sweden, Holland.

EXERCISES.—Which portion of Europe is not in the N. Temperate Zone? Should the west coast or the interior of Europe enjoy the milder and moister climate? and why? Verify the statement that Europe is the most densely-peopled continent. To which group do the principal languages of Europe belong? Draw a map of Europe, shewing the distribution of Races and Languages.

ASIA.

Boundaries.—N., Arctic Ocean; W., Ural Mts., Ural R., and Caspian Sea, Archipelago, Levant, Isth. of Suez, and Red Sea; S., Indian O.; E., Pacific O.

General Aspect.—The general form of Asia is that of a trapezium, but with large peninsular projections on the S. and E. Its surface contains the greatest and loftiest land-masses—plateaux being its most distinctive feature. A great belt of high land extends from the Medit. and Red Sea eastwards to Corea, a length of 6,000 m., with a width of 2,000 in the E., but narrowing towards the W. In Central or High Asia, spread out at a height equal to the highest mts. of Europe, all the great rivers of Asia take their rise. But much of the drainage never reaches the three surrounding oceans, being received by inland sheets of water in the Great Basin of Continental Rivers. To the N. is the immense Plain of Siberia, $\frac{1}{3}$ larger than Europe, and on the W. is an immense area of depression around the Caspian.

Northern Asia consists of a great plain; **Middle Asia**, chiefly of mts. and plateaux; **Southern Asia**, chiefly of peninsulas.

COUNTRIES OF ASIA.

NORTHERN ASIA.
Sibe'ria or Asiatic Russia.

MIDDLE ASIA.
Turkestan' or Independent Tar'tary.
Chinese Empire, including China Proper, Chinese Tar'tary,* and Tibet'.
Japan'.

* Chinese Tartary includes Corea, Manchoo'ria, Mongo'lia, Dzoonga'ria, and Chinese Turkestan.

SOUTHERN ASIA.
Turkey in Asia.
Ara'bia.
Per'sia.
Afghan'istan'.
Belooch'istan'.
In'dia or Hindostan'.
Further India,* or Indo-China.

* Further India includes British Provinces, Bur'mah, Siam', La'os, Annam', and Malay'a.

EXERCISES.—What separates the nearest points of Asia and America? Which is most nearly connect Asia and Australia? How near does Asia approach the N. Pole and the Eq.? Which point is farthest distant from the coast, and how far? Give all the boundaries of the several countries of Asia. Which countries have no sea-coast? Which are in the N. Frigid Zone? in the N. Temperate Zone? in the Torrid Zone? Which are insular? Which peninsular?

SEAS AND GULFS.

ARCTIC O.

G. of O'bi, N.W. of Siberia.

MEDITERRANEAN.

Black Sea, Sea of Mar'mora, and Archipel'ago, bet. Turkey-in-Asia and Europe.

Levant', E. part of the Medit.

INDIAN O.

Arabian Sea, bet. Arabia and India.

BRANCHES:—

G. of A'den and Red Sea, in the W.
G. of O'man & Persian G., in the N.W.
G. of Cutch and G. of Cam'bay', in the E.

G. of Manas'r, bet. India and Ceylon.

B. of Bengal', bet. India and Further India.

BRANCH:—

G. of Martaban', in the E.

PACIFIC O.

Chinese Sea, S. of China.

BRANCHES:—

G. of Siam' and G. of Tonquin'.

Yellow Sea, or Whang-Hai, N.E. of China.

Sea of Japan', W. of Japan.

Sea of Okhotsk' and Sea of Kamtchat'ka, or Beh'ring Sea, E. of Siberia.

Red Sea or Arabian Gulf.—Its shores are mountainous, and being almost devoid of rivers, its waters are saltier than the ocean. When the south winds blow, from Oct. to May, the waters are raised at the northern end much higher than the level of the Medit. From its sudden gales, numerous shoals, and coral reefs, the navigation is difficult. It receives its name, most probably, from the red coral and animalcula of its waters. Persian Gulf.—On its W. shore is a valuable pearl-fishery. The Chinese Sea is frequently visited with typhoons, or rotary storms, which are very destructive. The Yellow Sea is so named from the yellow sediment which colours its waters, brought down from the great plain of China by the Yellow River.

ISLANDS.

ARCTIC O.

Liakhov' Is., or New Siberia.

MEDITERRANEAN.

Rhodes and Cyprus, S. of Asia Minor.

INDIAN O.

Lac'cadive and Mal'dive Is., S.W. of India.

Ceylon', S. of India.

Andaman and Nic'obar Is., in the B. of Bengal.

PACIFIC O.

Hainan', Macao, Hong-Kong, S. of China.

Formosa, Chusan', Loo-Choo Is., E. of China.

Japan' Is., E. of Chinese Tartary.

Sagha'lien, in the Sea of Okhotsk.

Ku'rile Is., bet. Japan and Kamtchatka.

Aleutian Is., bet. Kamtchatka and America.

For the East Indian Islands, see under Oceania, page 66.

Liakhov Is. are desolate, but noted for fossil remains. The Lac'cadive and Mal'dive groups are low coral reefs. Andaman Is.—The natives are dwarfs, 4 ft. 5 in. high when full grown, and wear no clothing but a covering of mud. Port Blair forms the penal settlement for India, where Lord Mayo, Governor-General of India, was assassinated in 1872.

PENINSULAS.

Asia Minor, W. of Turkey in Asia.
Arabia, in the S.W.

Further India, or Eastern Pen.,
in the S.E.

PENINSULAS—continued.

Malay'a, or Malay' Pen., S. of Further India.	ISTHMUSES.
Core'a, E. of Chinese Tartary.	Isth. of Suez, joining Africa to Asia.
Kamtschat'ka, E. of Siberia.	Isth. of Kraw, joining Malaya to Siam.

Asia Minor, or **Anatolia**, the region to which the name of 'Asia' was first applied; but when this name was extended to the whole continent it became in comparison Asia Minor, *i. e.*, 'Asia the Less.' The 'Asia' of the New Testament was in the west of Asia Minor. **Isth. of Suez**, 72 miles wide; surface mostly moving sands, with several salt or bitter lakes; part of the Overland Route to India and the East—crossed by a great Ship Canal. **Isth. of Kraw or Krah**, 45 m. wide; a railway across is contemplated.

STRAITS.

ON THE SOUTH.	ON THE EAST.
Str. of Bab-el-Man'deb, entrance into the Red Sea.	Str. of Formosa, bet. China and Formosa.
Str. of Ormuz, entrance into the Persian G.	Str. of Core'a, bet. Corea and Japan.
Palk's Str., bet. India and Ceylon.	Behring Str., bet. Asia and America.
Str. of Malacca, bet. Malaya and Sumatra.	

Bab-el-Mandeb, ('Gate of Tears,') so called from being the scene of numerous shipwrecks. **Palk's Str.** is not navigable by large vessels, owing to a shallow reef stretching across it, called Adam's Bridge. **Behring Str.**, 36 m. wide.

CAPES.

ON THE NORTH.	ON THE EAST.
C. Seve'ro, or North-East Cape, N. of Siberia.	C. Comorin', S. of India.
	C. Negra'ia, S.W. of Pegu.
	C. Roman'ia, S. of Malaya.
	C. Cambo'dia, S. of Annam.
ON THE WEST.	ON THE EAST.
C. Ba'ba, W. of Asia Minor.	C. Lopat'ka, S. of Kamtschatka.
ON THE SOUTH.	East Cape, at Behring Str.
Ras-al-Had, E. of Arabia.	

EXERCISE.—Name the only two inland seas of Asia, strictly so called. Name the countries and islands bordering on each of the Seas and Gulfs. Which two continents are pens. of Asia? Point out other ten pens. in Asia. Describe two lines that would cut off all the pens. on the S. and E. Compare the southern projections of Europe and Asia with each other, and state how they appear to correspond. What seas are joined by the straits of Asia? Name the straits between Asia and Europe. Name the four capes forming the extreme points of the continent, N., W., S., and E. Which are nearly on the same meridian? Which is near the Arctic Circle? What is the difference of time bet. the extreme E. and W. points at 15 min. per degree? Draw a Map of Asia, shewing the foregoing features.

MOUNTAINS.

SYSTEMS.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
			Feet.
WESTERN,	Armenian Mts., . .	Bet. Turkey & Persia,	Mt. Ararat, 17,112
	Caucasus Mts., . .	Bet. Caspian and Black Seas, . . }	Mt. Elbûrz, * 18,493
	Taurus and Anti-Taurus,	Asia Minor, . . . }	Arj'ah-Dagh, 13,197
	Lebanon Range,	Syria, & Peninsula of Sinai, . . . }	Mt. Hermon, 10,000
	Zagros Mts., . . .	West of Persia, . .	Mt. Bis'tun, 12,000
	Elbûrz' Mts., . . .	North of Persia, . .	Mt. Demavend', . . . 21,000
	Paropamis Range,	N.E. of Persia, . .	Koh-i-Baba, 16,000
	Hindoo Koosh Mts.,	Bet. India & Turkistan,	Hindoo Koosh, 20,000
	Suliman Mts., . .	Afghanistan & Beloochistan, . . . }	Takht-i-Suleimaun, . . . 6,260
	Bolor Tagh, . . .	Bet. Chinese & Independent Turkistan, N. of Chinese Turkistan,	? . . 19,000
CENTRAL,	Altai Mts., . . .	Chinese Turkistan, and Tibet, . . }	Bieliukha, . . 12,796
	Thian-Shan' Mts.,	Bet. Chinese Turkistan and Tibet, . . }	Khan Tengri, 21,000
	Ku'en-Lun, . . .	Bet. Chinese Turkistan and Tibet, . . }	? . . 22,000
	Karakorum Mts.,	Bet. Chinese Tartary and Little Tibet, . . }	Dapsang Peak, . . 28,278
	Himalaya Mts., . .	Bet. Tibet & India, . . }	Mt. Everest, 29,002
	Khin-gan, In-shan, and Yun-ling' Mts.,	E. of Mongolia and Tibet, }	? . .
NORTH-EASTERN,	Yablonoi and Aldan Mts.,	S.E. of Siberia, . .	? . .
EASTERN,	Pe'ling' & Nan-ling' Mts.,	N. and S. of China Proper, }	12,000 and 8,000
	Mts. of Aracan, Burmah, Siam, and Annam,	Further India, . . }	Tidibangsa, 6,561 (Malaya.)
SOUTH-EASTERN,	Neilgherries E. & W. Ghauts, Vindhya Mts.,	Southern India, . . }	Dodabet'ta, 8,760 (Neilgherries.)
INDIAN,			

The **Armenian Mts.** are the nucleus from which radiate the other chains of the Western System. **Mt. Ararat**, at the junction of three great empires, Russia, Turkey, and Persia, is supposed to have been the place where Noah's Ark rested. **Takht-i-Suleimaun** means 'Throne of Solomon.' **Bolor Tagh**, ('Cloudy Mts.') the western boundary of the Central Mt. System, or Eastern Table-land, and situated midway between C. St. Vincent and East Cape, may be considered the nucleus from which spring all the mt. chains of Europe and Asia. **Altai Mts.**, celebrated for mines of gold, silver, and lead. **Himalayas**, ('Abode of Snow,') the loftiest and most stupendous mountains in the world—1500 m. in length, and 100 to 160 m. in breadth. Besides **Everest**, or **Gaurisankar**, (the highest point of the globe,) **Kunchinjunga** and **Dhawalagiri** are above 28,000 ft., six summits are above 25,000, and 22 above 20,000; mean elevation, 15,670 ft.; snow-line on S. side, 16,200 ft., on N. side, 17,400.

Volcs. are abundant in Kamtchatka and the eastern Is., but are not found in the interior, except two in the **Thian-Shan** or **Celestial Mts.**, 1,500 m. from the coast—the only active inland vols. known.

* This summit is situated in Europe, and therefore the highest point of that continent, but the whole range is strictly Asiatic.

PLATEAUX AND PLAINS.

Ft. high.

EASTERN PLATEAU.		Arabian Plat., in Cen-	
Comprising—		tral Arabia, . . .	
Tibet, in Central Asia, Ft. high.		The Deccan, in Southern	5,000
10,000 to 15,000		India, . . .	2,500
Gt. Desert of Go'bi, . . .	5,000	PLAINS.	
Mongolia, . . .	4,000	Pl. of Siberia, with Steppes in	
Valley of Cashmere, . . .		the S. W.	
N. W. of India, . . .	6,000	Pl. of Turkestan, E. of the	
WESTERN PLATEAU.		Caspian.	
Comprising—		Pl. of Mesopota'mia, S.E. of	
Iran, in Persia and		Turkey.	
Afghanistan, . . .	4,000	Pl. of Hindostan, in N. of India.	
Arme'nia, S.E. of Black		Pl. of Indo-China.	
Sea, . . .	7,000	Pl. of China.	
Anatolia, in Asia Minor, . . .	3,000		

The Plat. of Fami'r in the W. of Tibet, 15,600 ft. high, is styled by the inhabitants, *Bam-i-dooniah*, or 'Roof of the World.' Valley of Cashmere, surrounded by mts., is said to be the most beautiful and interesting spot on earth. The Plains of Mesopotamia and Babylonia, watered by the Euphrates and Tigris are famous as the seats of the earliest empires. The Plains of the Ganges, (N. of India,) Indo-China, and China, are fertile and densely peopled.

EXERCISE.—Name in order the continuous mt. chains from C. St. Vincent to E. Cape. Give the ranges that diverge from the Bolor Tagh, and the directions they take. Which chains are entirely detached from the other mt. systems? and by what are they separated? Arrange the highest summits in the order of height; reduce the feet to miles; and compare these heights with that of Mt. Blanc, and with some height with which you are familiar. Which mt. chain unites the Eastern and Western Plateaux? Name the mt. chains that bound them. Name those that support the Deccan. Arrange the plateaux in the order of height. Draw a map of Asia, shewing the chief Mts., Plateaux, and Plains.

RIVERS.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.
I.—NORTHERN SLOPE.				
THE ARCTIC BASIN.				
Lena, . . . {	West of Lake	N.E. & N.,	Eastern Siberia, . .	Arctic Ocean.
Yenise'i, . . . {	Baikal, . . .	N.,	Central Siberia, . .	Bay of Yenisei.
Obi, . . . {	Mongolia, . . .	N.W. & N.,	Western Siberia, . .	Gulf of Obi.
	Altai Mountains			
II. SOUTHERN SLOPE.				
1. INDIAN OCEAN BASIN.				
Euphra'tes,	Armenian Mts.,	W. & S.E.,	East of Turkey, . .	Persian Gulf.
Ti'gris, . . .	"	S.E.,	"	Euphrates.
Indus, . . .	Tibet, " . . .	N.W. & S.,	Tibet & W. of India,	Arabian Sea.
Ganges, . . .	Himalayas, . .	S.E.,	North of India, . .	Bay of Bengal.
Brahmapu'tra,	{ Tibet, . . .	E. & W.,	{ Tibet and N.E. }	"
Irrawaddy,	Borders of Tibet.	S.,	Burmah and Pegu,	G. of Martaban.
Salween, . .	"	S.,	"	"
2. PACIFIC BASIN.				
Meknam', . .	Borders of China,	S.,	Siam,	Gulf of Siam.
Mekong', . .	"	S.,	Annam,	Chinese Sea.

RIVERS—continued.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.
III. EASTERN SLOPE.				
PACIFIC BASIN.				
Yang-tse-kiang, . . .	Tibet, . . .	E.,	Central China, . .	Yellow Sea.
Hoang-ho, . . .	" . . .	E.,	Northern China, .	"
Amoor' or Saghal'ien,	North of Mongolia, . . .	E., {	S.E. of Siberia and N. of Manchouria,	{ G. of Tartary.
CONTINENTAL.				
Sir-dari'a, or Sihoon', . .	Thian Shan } Mountains, }	W.,	Turkestan, . . .	Sea of Aral.
Amoo', or Ox'us, . .	{ Lake Sir-i-Kol, }	N.W.,	" . . .	"
Tar'im, or Erg'heui, . .	{ Bolor Tagh and Karakorum Mountains, }	E.,	Chinese Turkestan,	Lake Lob-nor.
Kür, . . .	Caucasus Mts., }	E.,	Georgia,	Caspian Sea.
Helmund, . . .	N.E. of Afghanistan, . . .	{ S.W.,	S.W. of Afghanistan,	{ Lake Hamoon or Zurrah.
Jordan, . . .	Mount Lebanon, }	S.,	Palestine, . . .	Dead Sea.

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
Obi,	2,000	1,250,000	Hoang-ho, . .	2,600	400,000
Yenisei, . . .	3,400	1,110,000	Brahmaputra, .	1,300	850,000
Lena,	2,550	960,000	Sir-daria, . .	1,200	320,000
Amoor,	2,640	900,000	Tarim,	1,000	240,000
Yang-tse-kiang,	3,600	760,000	Euphrates and	1,800 }	230,000
Ganges,	1,514	420,000	Tigris, . . .	1,150 }	
Indus,	1,800	400,000			

The Southern Rivers are comparatively rapid, but those of Siberia are excessively sluggish, owing to their long and gradual slope. The latter are of no commercial importance, being frozen the greater part of the year; and their head-waters melting much earlier in the season than those of the lower basins, the country around is flooded for months every year.

The Euphrates and Tigris united are termed the Shat-el-Arab, 130 m. in length. The Indus rises 22,000 ft. above sea-level, and for 540 m. above its mouth it flows on a ridge elevated above the plain. The Ganges rises 13,800 ft. above the sea, issuing at once a large river from under a low arch of snow, 300 ft. thick. It receives about 20 large rivers, 12 of them larger than the Rhine. Its delta is one of the largest, being equal in size to Wales; the Sunderbunds, or islands composing it, covered with jungle occupied by numberless wild beasts, are frequently flooded, and very unhealthy. The Ganges is the 'Sacred Stream' of India—receiving idolatrous reverence from the Brahmins. The Yang-tse-Kiang is navigable 2,700 m., and the Amoor 2,200 m. The Hoang-ho, or Yellow River, the Indus, and the Ganges, carry to the sea immense quantities of earthy matter from the alluvial plains they traverse.

LAKES.

SYSTEM.	LAKES.	POSITION.
Northern,	Bai'kal, Kos'gol; Zaisan',	Siberia, Mongolia.
Eastern,	Tong-ting, and Po-yang,	China.
Continental Basin,	Caspian Sea, and Lake A'ral, . . .	Turkestan, &c.
	Dead Sea; Van, Urumi'ah, . . .	Syria, Armenia.
	Hamoon', or Zur'rah,	Afghanistan.
	Balkash', Issyk-kul, Ubsa; Lob-nor; .	Central Asia.
	Sir-i-kol; Ten'gri, Pal'te; Ko-ko-nor, }	

L. Baikal, 14,800 sq. m., the largest fresh-water lake in Asia. Its name signifies the 'Holy Sea,' it being held in superstitious reverence by the Russians. During winter its frozen surface is traversed by sledges laden with tea and other commodities from China. The **Caspian Sea**, 140,000 sq. m., (about 4½ times the size of Scotland,) is 83 ft. below the level of the Black Sea. The **Dead Sea**—1312 ft. below the Medit., 40 m. long by 9 broad—is so named from the desolation of its shores, and the scarcity of animal life in and around it. Its waters are extremely salt, and so heavy that the human body will not sink in them. It is also called the L. of Sodom, and by the Arabs, Bahr-el-Lüt, or 'Sea of Lot.'

EXERCISES.—Point out and name the great mt. ridges at the head of the three great slopes. Point out the boundaries of the Great Continental Basin. Which rivers of Europe belong to it? Which of the above rivers have deltas? which estuaries? Which are arranged in pairs, i. e., in a 'binary system'? Which form boundaries of countries? Arrange these rivers in the order of length, and compare them with each other, and with the Thames. Compare the largest basins with the area of the British Isles. Name from the map the chief tribes of the Lena, Yenisei, Obi, &c. Give the river-basin, and also the mt. system or plat. with which each lake is connected. What is the characteristic of the waters of the continental lakes? Draw a map of Asia, shewing the Rivers and Lakes.

COUNTRIES AND CAPITALS, &c.

COUNTRIES.	AREA, Sq. m.	POP. (Mill.)	CAPITALS.	POSITION OF CAP.	POP. OF CAP. (Thous.)	RELIGION.
SIBERIA, . . .	5,586,000	4	Tobol'sk, .	R. Ir'tish, .	18	Various.
TURKESTAN, .	413,000	4	Bekhâ'tra, .	E. of R. Amoo, .	160	Moham.
CHINESE EM- PIRE, . . . }	5,800,000	415	Pekin', . .	R. Peiho, . .	2,000	Buddhism
JAPAN, . . .	266,000	35	Yed'do, . .	I. of Nippon', .	1,700	"
TURKEY IN ASIA,	670,000	16	Smyr'na, .	Ægean Sea, .	150	Moham.
ARABIA, . . .	1,200,000	8	Meo'sa, . .	E. of Red Sea, .	80	"
PERSSIA, . . .	552,000	10	Teheran', .	{S. of Elbûrz Mts. . . .}	60	"
AFGHANISTAN, .	225,000	5	Cabool', .	R. Cabool, .	60	"
BELOOCHISTAN, .	160,000	½	Kelat', . .	In the N.E., .	12	"
INDIA, . . .	1,476,000	186	Calcut'ta, .	R. Hoogh'ly, .	600	{Brahmin- ism.
FURTHER INDIA,	880,000	27½	{Mand'elay, &c., . . .}	Irrawad'y, &c., .	..	Buddhism.

EXERCISES.—Arrange these countries and caps. in the order of size and of pop. Compare the countries, in respect to size and pop., with Gt. Britain. Which of these caps. are near the Tropic of Cancer, and which near 40° N. Lat? Which European caps. are nearly due W. of Tobolsk? Draw a map of Asia.

Climate.—Asia, from its vast extent and varied elevation, exhibits every variety of climate. The mt. chains naturally form three great climatic zones from N. to S. In the Northern Zone the limit of constantly frozen ground extends from the White Sea to the Sea of Okhotsk. The Middle Zone, which comprises the elevated table-lands of Central Asia, is cold and dry, being shut out from the S., and exposed to piercing winds from the N. The Southern Zone lies within the region of the Monsoons, and is therefore exposed to excessive rains from Ap. to Oct.; while during our winter is the dry season, when the Monsoons are from the N. E.

Speaking generally, the climate of Asia is cold and dry in the N.; hot and dry in the S.W.; hot and humid in the S.; cold and humid in the E.

PRODUCTIONS.—(1.) **Minerals.**—The mineral treasures of Asia are rich and varied, though but partially developed. Asia is the great store-house of precious stones. The chief mineral products have the following distribution:—

Gold, Copper, and Platinum, in the Urals.	Nitre, in India.
Gold, Silver, Iron, and Lead, in the Altai Mts.	Bitumen or Asphalt, in the Dead Sea.
Mercury, in China, Tibet, and Japan.	Petroleum, on the shores of the Caspian.
Coal, in Syria, India, China, and Japan.	Kaolin, or fine porcelain clay, in China and Japan.
Salt, in Siberia, Asia Minor, Arabia, India, China, and Central Asia.	Diamonds, in the Deccan and the Urals.
Tin, in the Eastern Peninsula and Japan.	The largest Topazes in Siberia.
	The finest Sapphires in Ceylon.
	The best Rubies in Burmah.

(2.) **Vegetables.**—In the NORTHERN ZONE the extreme North has the characteristic Arctic vegetation, but in the more southern



TEA PLANT AND COFFEE PLANT

portions of Siberia are forests of pine, birch, and willow. The MIDDLE ZONE has large forests of deciduous trees and vast pasture lands in the centre. Western Asia is characterized by the olive, fig, citron, and walnut, China and Japan by the tea-shrub, camphor-tree, and orange, while the rhubarb of the druggist occurs from Persia to China. The SOUTHERN ZONE is remarkable for the exuberance, variety, and usefulness of its plants. This is the climate of tropical grains, the coffee-plant, palms, and bananas. Besides rice, the chief grain of Asia, its principal food-plants are the date, (chiefly in the S. W.,) cocoa, sago, banana, plantain, and yam.

The vine, our finest fruits, the important cereals, wheat, barley, and oats, the sugar-cane, and many of our fairest flowers, are all natives of Asia.

(3.) **Animals.**—Asia is pre-eminent for the variety and importance of its animal forms. Troops of the wild horse and ass, with wild goats and sheep, abound in the upland plains and mts. of the centre. Peculiar to Tibet is the yak, or Tibetan ox. The Bactrian, or two-humped camel of the S. W. meets with the reindeer of the N. on the confines of Siberia. The tiger, peculiar to Asia, has his favourite haunts around the B. of Bengal; the lion, elephant, and rhinoceros are common to Asia and Africa, but of different species. The orang-outang, with many other monkeys, is found in the Malay Peninsula. Of reptiles the most deadly are the Indian python, the cobra de capella, and the gaviol, or crocodile of the Ganges. The countries of the S. W. are subject to the ravages of the locust.

All our domestic poultry, except the turkey, have been originally derived from Asia, where they run wild in the woods along with the peacock and pheasant. The silk-worm is a native of China, the nightingale of Persia, the horse of Central Asia, and the ass of Beloochistan.

PEOPLE.—The population of Asia is thinly distributed over Siberia, High Asia, Turkestan, Persia, and Arabia, but densely massed in India, China, and Japan. Asia is considered the cradle of the human race.

[For Races, Languages, and Religions, see pages 24, 27, 28.]

Gov., &c.—The govts. are despotic, representative gov. being entirely unknown. There are six empires, viz.,—the Russian, in Siberia; the British, in India; China, Japan, Turkey, and Persia. Turkestan, Arabia, Afghanistan, Beloochistan, and Further India, consist each of a number of separate states governed by independent rulers or chiefs. The Chinese, Japanese, and Hindoos are the most civilized; the Tartars of Central Asia are nomadic tribes; the Samoiedes and other tribes of Northern Siberia are extremely rude and ignorant, while the remainder are more or less possessed of a rude civilization.

EXERCISES.—Which countries of Asia are comprised in the great Rainless Belt? Which in the N. Climatic Zone? Which in the Middle? Which in the Southern? Name the mt. chains that bound these Zones. Is the general climate of Asia continental or maritime? What, therefore, will be its characteristics? What will be the characteristic vegetation of the extreme N. of Asia? Name the mt. chains that divide the two great Races of Asia?

AFRICA.

Boundaries.—N., the Medit.; W., the Atlantic; E., the Indian O., Red Sea, and Isth. of Suez.

General Aspect.—Africa in figure is an immense peninsula of the Old World, of an irregular pear-like form, projecting southwards, with one deep indentation on the W., and a corresponding protuberance on the E. It is thus singularly free from indentations, and its shores are almost destitute of islands. The surface has been compared to an inverted ashet or pudding-dish—consisting of a narrow low-lying sea-board, with high table-land in the interior, bounded by lofty mountains running parallel with the coast. Great desert tracts are a distinctive feature of Africa, such as the Sahara, or Great Desert, in the N., and the Kalahari Desert in the S., but much of the interior is still unexplored. Near the Eq. are magnificent lakes recently discovered, forming the long-sought sources of the Nile.

COUNTRIES OF AFRICA.

NORTH-EASTERN AFRICA.	WESTERN AFRICA.	EASTERN AFRICA.
E'gypt.	Senegam'bia.	Sofá'la.
Nu'bia.	Upper Guin'ea.	Mozambiq'ue,
Abyssin'ia.	Lower Guin'ea.	Zanguebar'.
		A'jan.
NORTHERN AFRICA.	SOUTHERN AFRICA.	Somau'li.
Bar'bar'y States, viz.:	Cape Col'ony.	Madagas'car.
Moroc'co.	Ca'fra'ria and Natal'.	
Alger'ia.	Orange River Free	N. CENTRAL AFRICA.
Tunis.	State, or Republic.	Sahâ'ra.
Trip'oli.	Transvaâl' Republic.	Soudan'.

EXERCISES.—What separates the nearest points of Africa and Europe? What connects Africa and Asia? What separates them? Compare the area of Africa with that of the whole land-surface of the Globe. To which continent does its outline present the greatest resemblance? Give the boundaries of each of the countries of Africa. Arrange the countries according to zones. Which are intersected by the Tropics, and which by the Eq.?

GULFS, BAYS, &C.

IN THE MEDITERRANEAN.

- G. of Sid'ra, N. of Tripoli.
G. of Cab'es, E. of Tunis.

IN THE ATLANTIC.

- G. of Guin'ea, S. of U. Guinea, comprehending—

The Bight of Benin', and the Bight of Biafra.

ON THE SOUTH.

- St. Hele'na B., Table B., and False B., S.W. of C. Colony.
Algo'a B., S.E. of C. Colony.

IN THE INDIAN OCEAN.

- Delago'a B., S. of Sofala.
Sofá'la B., E. of Sofala.
G. of A'den and Red Sea, bet. Africa and Arabia.

ISLANDS.

IN THE N. ATLANTIC.

The *Madeira*s, *Canaries*, and
C. Verd Is.

IN THE G. OF GUINEA.

Fernando Po, Prince's I. or
Principe', St. Thomas, and
Annabona or Annabon'.

IN THE S. ATLANTIC.

Ascension and St. Helena.

IN THE INDIAN O.

Madagascar, Bourbon' or Re-
union, Mauritius or I. of
France, Rodriguez, Comoro
Is., Zanzibar, Amirante Is.,
Seychelle Is., Chagos Is.,
and Socotra.

The *Madeiras*, noted for their fine climate, and a favourite resort of invalids, produce wines and fruits. The *Canaries*, of volcanic origin, give name to *Canary* birds. *Ascension*, famous for turtles. *St. Helena*, a rugged volcanic islet, with precipitous shores; noted as the place of exile to Napoleon I. from 1816 till his death in 1821. *Madagascar*, about 1000 m. long, supposed to be the third largest I. in the world. *Mauritius* and *Bourbon*, fertile Is.; produce sugar, coffee, spices, and the finest ebony. *Socotra* produces the finest aloes.

STRAITS AND ISTHMUS.

Str. of Gibraltar.

Channel of Mozambique.

Str. of Bab-el-Man'deb.

Isthmus of Suez.

CAPES.

NORTH.

C. Bon and Ras-el-Krun, N. of
Tunis.

C. Ceuta and C. Spartel, S. of
Str. of Gibraltar.

WEST.

C. Nun, C. Bojador', and C.
Blanco, W. of Sahara.

C. Verd, W. of Senegambia.

C. Palmas, C. Three Points, and

C. Formosa, S. of U. Guinea.

C. Lopez, C. Negro, and C. Fri'o,
W. of Lower Guinea.

SOUTH.

C. of Good Hope and C. Agulhas,
S. of Cape Colony.

EAST.

C. Corrientes, S.E. of Sofala.

C. Delgado, N.E. of Mozam-
bique.

C. Guardafui', N.E. of Somali.

C. Amber, N. of Madagascar.

C. St. Mary, S. of Madagascar.

In the names of these capes, *Ras* means cape; *Bojador*, round; *Blanco*, white; *Verd*, green; *Negro*, black; *Agulhas*, needles; *Delgado*, sharp. The rocks of *Gibraltar* and *Ceuta*, on opposite sides of the Strait, formed the ancient promontories of *Calpe* and *Ab'yla*, commonly termed the 'Pillars of Hercules.' C. Verd received its name from a group of enormous baobab trees on its summit. C. of Good Hope, (often styled 'The Cape,') 1,000 ft. high, one of the most famous capes in the world. Its first name, 'Cape of Storms,' was changed when the rounding of it, in 1487, gave good hope of reaching India by sea. C. Agulhas, 455 ft. high, crowned by a light-house; off this the Agulhas Bank; its meridian (20° E.) divides the Indian O. from the Atlantic.

EXERCISES.—Give the relative position of each of the Is. How far is Ascension from the mainland of Africa? and of America? Name the only large I. of Africa. Name the countries on each side of the Straits and Isthmus. Which are the extreme points of Africa, N., S., E., & W.? Which capes form the extreme limits of the G. of Guinea, and of the Chan. of Mozambique? Which bays flank the Cape of Good Hope? Which capes have Is. lying off them? Draw a map, shewing the foregoing features of outline.

MOUNTAINS.

SYSTEMS.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
			Ft.
NORTHERN,	Atlas Mountains, .	Barbary, . . .	Mount Milt'sin, 11,400
	Kong Mountains, .	Canary Islands, .	Peak of Teneriffe, 12,182
WESTERN,	Cameroon Mts., .	N. of U. Guinea, .	Mount Ren'nel, 3,200
	Nieuveldt & Sneeu- berg'en Mts., . .	Biafra, in Upper Guinea, . . .	Mt. Al'bert, . 13,129
SOUTHERN,		Cape Colony, .	Com'passberg, . 9,000
	Drak'enberg, Lupa'ta Mountains, &c., .	{ Natal, Moz- ambique, & Zanguebar, .	Kilimandj'ro, . 20,065
EASTERN,	Abyssinian Mts., .	Abyssinia, . . .	Ras Det'schen, . 15,986
	Madagascar Mts., .	Madagascar, . .	Ankarat'ra, 10,000-12,000
CENTRAL,	Mts. of the Moon, .	{ Equatorial Africa, . . .	? 10,000
	Chad'da Mountains, .	S. of L. Tchad, .	Mt. Alant'ika, . 10,000

The Atlas Mts., 1,600 m. in length, mean height 7,000 ft., consist of several parallel chains, from 50 to 90 m. in breadth; snow-line 11,000 ft. Peak of Teneriffe, or Pico de Teyde, an active vol. Table Mt., near C. of Good Hope, 3,816 ft., is so named from its flat top; and the white cloud frequently seen on its summit is termed the 'table-cloth.' Mt. Kilimandjaro, supposed to be the highest point of Africa, rises 3,000 ft. above the snow-line.



CAPE OF GOOD HOPE, TABLE MT., CAPE TOWN, AND TABLE BAY.

PLATEAUX, PLAINS, AND DESERTS.

The Sahá'ra or Great Desert.

Great Central Plain, S. of Sahara.

Plat. of Abyssin'ia, 7000 ft. high.

Plat. of S. Central Africa.

Kalahá'ri Desert, N. of C. Colony.

Gt. Karroo', S. of Nieuveldt Mts.

The Sahara, 3,000 m. by 1,000 m. (as large as the Medit.)—low level sands in the W., rising towards the E. to a plateau 1,000 to 3,000 ft. high. Fertile spots in the desert, with springs of water, are termed *oases*. Kalahari Desert, 2,000 to 3,600 ft. high, almost destitute of vegetation. S. Central Africa, from 5° N., has the form of an elevated trough. Great Karroo: a desert—its soil composed of particles of iron mingled with sand.

EXERCISES.—Trace on the map the connected coast mt.-chains. Where are the two great breaks in these chains? Which is associated with the Atlas Mts.? Which other chains have is. associated with them? Arrange the highest smts. in the order of height; reduce the ft. to m.; and compare them with Mt. Blanc, with each other, and some well-known height. Which Asiatic pen. bears a resemblance to S. Africa? Trace the analogy. Draw a map, shewing the Mts., Plateaux, Plains, and Deserts of Africa.

RIVERS.

RIVER.	RISES IN.	FLWS.	THROUGH.	FALLS INTO.
I.—NORTHERN SLOPE.				
MEDITERRANEAN BASIN.				
Nile, .	{ Victoria N'yanza and Albert N'yanza, . . }	N., {	Central Africa, Nubia, and Egypt, .	Mediterranean Sea.
II.—WESTERN SLOPE.				
ATLANTIC BASIN.				
Senegal', .	Kong Mounts.,	N.W. & N.,	North of Senegambia,	Atlantic.
Gambia, .	"	N.W.,	Central "	"
Niger, .	"	N.E. & S.E.	{ Soudan and Upper Guinea, . . .	Gulf of Guinea.
Joliba, or Quorra, .	"	"	"	"
Zaire or Congo, .	Lake Dilolo, .	N. & W.,	Lower Guinea, . .	Atlantic.
Orange River, .	Nieuveltdt Mts.,	W., {	Cape Colony & Country of Hottentots, }	"
III.—EASTERN SLOPE.				
INDIAN OCEAN BASIN.				
Zambezi, .	Lake Dilolo, .	S. & E.,	S. Central Africa, {	Channel of Mozambique.

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
Nile, . . .	3,766.	520,000	Senegal, . .	1,000	?
Niger, . . .	3,500	?	Congo, . . .	1,000?	?
Zambezi, . .	2,400	432,000	Orange R., .	1,000	?

The Nile, the most celebrated river in the world, and the longest in direct distance, (3,850 m.) The main branch is the Bahr-el-Abiad, or White Nile, and the chief trib. is the Bahr-el-Azrek or Blue Nile, from L. Dem'bea, in Abyssinia. From the junction of the Tacazze, or Atbara, 1740 m. from its mouth, the Nile receives no trib.; its volume decreases from the immense evaporation, and its basin contracts to a width of from two to ten m., bounded by two parallel mt.-chains. Its Delta is flat, 90 m. in length, with 180 m. of coast. Its annual inundations, occurring with the greatest regularity in time and quantity, bring down, chiefly from the Blue Nile, the immense diluvium which fertilizes Egypt. The Zambezi is remarkable for the Victoria Falls, or Mosioatunya, ('smoke-resounding,') more than a mile wide, and 100 ft. high.

The chief rivers of Africa are characterized by periodic inundations, but they are of little commercial importance—their navigation being interrupted by cataracts, as in the Nile, by sandbanks or shoals, as in the Zambezi, or pestilential mangrove swamps, as in the Niger.

LAKES.

SYSTEM.	LAKES.	POSITION.
Central,	Victoria N'yan'za, Al'bert N'yan'za, Tanganyika,	Central Africa.
Northern,	Dem'bea, or Tza'na,	Abyssinia.
	Alaib'kah, Mel'gig; De'bo or Dib'ble, Tchad,	Barbary, Soudan.
Southern,	Dilo'lo, Shu'la, Shir'wa, N'ya'sai, N'ga'mi,	Zambesi Basin.

L. Victoria N'yanza, 53,000 sq. m., 3,740 ft. above the sea. **L. Tanganyika** is supposed to be connected with the Nile Basin. **L. Dilo'lo**, 4,740 ft. above the sea, is the source of both the Zambesi and the Congo. **L. Tchad**, 15,000 sq. m., shallow, and varying with the seasons; surrounded with a belt of almost impenetrable tall grasses. In the Atlas Mts., the Sahara, and Egypt, are numerous small salt lakes, termed *sebkahs*, often dried with the sun. **L. Assal**, a small salt lake in Abyssinia, near the G. of Aden, is 570 ft. below sea-level.

EXERCISES.—Which three rivers rise near each other? Which penetrate the coast chains? Which have deltas? Which mt. system gives rise to no large rivers? Which rivers form boundaries of countries? How could you cross Africa by water? Arrange the rivers in the order of length, and compare them with the Thames and each other. Name the mt. system with which each lake is associated. Name the river-basin each is connected with. Give the tribes of the Nile, Niger, and Zambesi. Draw a map of the River and Lake systems of Africa.

COUNTRIES AND CAPITALS.

COUNTRIES.	AREA. (Sq. m.)	POP. (Mil.)	CAPITALS.	POSITION OF CAP.	POP. OF CAP. (Thous.)
EGYPT,	178,000	5	Cai'ro,	R. Nile,	250
NUBIA,	300,000	2	Khartoum', . . .	R. Nile,	25
ABYSSINIA,	245,000	4½	Gon'dar, &c., . .	Near L. Dembea,	7
MOROCCO,	290,000	8½	Morocco,	R. Ten'sift, . . .	60
ALGERIA,	150,000	3	Algiers',	Medit.,	58
TUNIS,	79,000	1	Tu'nis,	Medit.,	200
TRIPOLI,	200,000	2	Tripoli',	Medit.,	16
SENEGAMBIA,	250,000	12	Bath'urst, &c., .	R. Gam'bia, &c.,	3
UPPER GUINEA, . . .	360,000	10½	Coomas'sie, &c.,	In Ashantee, &c.,	13
LOWER GUINEA, . . .	240,000		Loan'ge, &c., . .	The Coast, &c.,	20
C. COLONY, NATAL, } AND CAFFRARIA, }	240,000	½	Cape Town, &c.,	Table Bay, &c.,	25
ORANGE RIVER REP.,	34,000	1/20	Bloemfont'ain,	Orange R., . . .	..
TRANSVAAL REP., .	74,000	½	Potchef'stroom,	R. Vaal, . . . .	..
MOZAMBIQUE AND } SOFALA, }	200,000	½	Mozambiq'ue, . .	I. on the Coast,	8½
ZANQUEBAR,	706,000?	10?	Zanzibar', . . .	I. on the Coast,	60
MADAGASCAR, . . .	200,000	4	Tan'anari'vo, . .	Near the Centre,	25
SAHARA,	2,436,000	1	Mourzouk', &c.,	Oasis of Fezzan,	2
SOUDAN,	631,000	39	Timbuc'too, &c.,	R. Niger, &c.,	20

NOTE.—The area and the pop. of some of these states are uncertain, while the remainder of Africa is wholly or partially unexplored.

EXERCISES.—Arrange the countries in the order of (a) size and (b) pop., and compare them, in these respects, with Great Britain. Arrange the caps. in the order of pop. Which country is the most thickly populated? Which the most thinly? Draw a map of Africa, laying down the Countries and Capitals.

Climate.—From position, configuration, and surface, Africa is naturally the hottest and driest of the continents. Hot noxious winds blow from the Gt. Desert,—the Simoom in the N. and E., and the Harmattan in Senegambia. Low coast lands are specially insalubrious to Europeans; but the high lands of the Centre and South render the climate moderate and wholesome.

The rainy season of inter-tropical Africa prevails from Ap. to Oct. Sierra Leone, in Upper Guinea, one of the wettest regions of the globe, is so pestilential as to have been styled 'The White Man's Grave.'

PRODUCTIONS.—1. **Minerals**.—Africa appears to be more deficient in minerals than any of the other continents. Gold-dust, forming a leading article of commerce, is abundant in the alluvial soil, and even in the sands of the deserts.

Copper, iron, lead, and antimony are found in the Atlas Mts. Salt is the most valuable mineral, and pieces of salt in Abyssinia and elsewhere form the currency of the country. *Natron* or *soda* is obtained from lakes or springs chiefly in the E. of the Gt. Desert; coal is found in the Zambesi Basin; and diamonds are very abundant in the N. of C. Colony.

2. **Vegetables**.—Vegetable life is less varied in its forms than in the other continents, but it is rank and exuberant wherever there is a supply of water, as in the basins of the Senegal, Gambia, and Niger, which are clothed with the finest forests.

The vegetation of N. Africa resembles that of S. Europe. On the northern skirts of the Sahara is the *Belad-el-jerid* or Land of Dates, so called from the abundance of *date-palms*. The Sahara is characterized by a few prickly shrubs and grasses, except in the oases. In the Nile countries are the *coffee-plant*, (a native of Kaffa,) *cassia-plants*, from whose leaves *senna* is prepared, and the *papyrus* reed. The *tamarind* tree is the chief ornament of Soudan, in whose moist regions rice is cultivated. In Guinea are the *butter-tree*, *gum-tree*, *African teak*, *caoutchouc*, *cabbage-tree*, *mahogany*, *mangrove*, *acacia*, &c. From the Sahara, southwards to the Zambesi are found the *baobab* or *monkey-bread tree*, the *banyan*, the *sago-palm*, *oil-palm*, *sugar-cane*, *tobacco*, *cotton*, *indigo*, and *wild vine*. S. Africa is distinguished for succulent plants, bulbous roots, *geraniums*, and *heaths* of great beauty, and the *vine* is successfully cultivated.

3. **Animals**.—Africa excels the other continents in the richness and variety of its fauna, nearly all the species of the Old World being found, with many peculiar to itself.

Of the carnivora, the *lion* has three varieties—the *Barbary*, the *Senegal*, and the *Cape lion*; *leopards*, *panthers*, and *hyenas*, are numerous over the whole continent. The *elephant*, different in species from the Asiatic, and not domesticated, is found everywhere S. of the Sahara, and its ivory forms a chief article of export. The *rhinoceros* has the same habitat as the elephant, and the *hippopotamus* and *crocodile* frequent all the larger rivers. The *giraffe* or *camelopard*, *zebra*, *quagga*, and many species of *antelope*, are found toward the S., migrating at certain seasons, in countless herds, in search of pasture. *Monkeys* abound wherever the palm is plentiful; and the two species likeliest man are found on the west coast—the *Chimpanzee* in Senegambia, and the *Gorilla* at the Eq. The one-humped *camel* traverses the Gt. Desert. The most singular bird is the *ostrich*, which, along with *cobras*, *scorpions*, and *land-tortoises*, is confined to Africa. Of insects, *locusts* in countless myriads form the scourge of Africa, and scarcely less formidable are the *termites*, or *white ants* of tropical regions. In S. Central Africa is the *tsetse*, a venomous fly, whose bite is fatal to nearly all the domestic animals.

PEOPLE.—The Negro race is the most numerous. The Arabs are the prevailing race, politically, all over Africa, N. of the Eq., and their language is the chief medium of intercourse.

Religion.—Mohammedanism prevails in Africa wherever the Arabs are ascendant, but is most strictly observed in Barbary and the Nile Valley. Christianity, in a very corrupt form, is professed in Abyssinia. Fetichism, under various forms, prevails among all the Negro tribes, frequently attended with human sacrifices on a large scale. But on the W. and S. Christianity has been introduced by missionaries from Europe and America.

Gov., &c.—The Negroes are divided into a great number of independent petty states, ruled by hereditary chiefs—the most powerful being in Senegambia, Guinea, and Soudan, and the gov. is generally despotic. Most of the other states are dependencies of European Powers. The slave-trade is the great curse of Africa, causing frequent and cruel wars for the sake of procuring captives to be sold as slaves. Africa is the least civilized of the great divisions of the globe, but the character of the natives is much milder in the interior than near the coasts, where they have been corrupted by the slave-trade. Polygamy is universal.

EXERCISES.—Which part of Africa is hottest? Which part of it belongs to the great Rainless Belt of the Old World? Which to the Zone of Constant Rains? Which winds bring the rains of inter-tropical Africa? Give the four different races of man in Africa. Draw a map of Africa, shewing the distribution of Races, Languages, and Religions; also of Vegetables and Animals.

NORTH AMERICA.

Boundaries.—N., the Arctic O.; W. and S., the Pacific O.; E., the Atlantic O. and the Isth. of Darien.

General Aspect.—N. America is of a rude triangular form, with its base resting on the Arctic O., greatly indented on its eastern side, and with extensive archipelagoes on the N. and S.E. Its surface is distinguished for its great plains, watered by gigantic rivers, numerous large lakes, and an extensive mt.-chain in the W., traversing its entire length. It divides naturally into three great regions:—(1.) The Eastern Region, from the Atlantic to the Alleghany Mts.; (2.) The great Central Plain, from the Alleghany to the Rocky Mts.; (3.) The Western Region, from the Rocky Mts. to the Pacific, consisting chiefly of plateaux, 3,000 to 5,000 ft. in height, which support extensive mt.-chains running parallel with the coast.

COUNTRIES OF N. AMERICA.

British America.	United States, with	Mexico.
Greenland.	Alaska in the	Central America.
	N.W.	West Indies.

EXERCISES.—From what continents is N. America separated by the Atlantic and the Pacific? Give their nearest points, with their distance. Compare the area of N. Am. with that of the whole land-surface of the globe. What parallel of lat. is nearly parallel with the N. coast of the mainland? Give all the boundaries of each of the countries of N. Am. Which parallel and which meridian form boundaries? Which country is intersected by the Arctic Circle? Which by the Tropic of Cancer?

SEAS, GULFS, &c.

ARCTIC OCEAN.
G. of Boothia, Coronation G., and Mackenzie B., N. of the mainland.

PACIFIC OCEAN.
G. of Georgia, S.W. of Brit. Columbia.
G. of California, W. of Mexico.

ATLANTIC OCEAN.
Caribbean Sea, bet. Central America and W. Indies:—

Comprising B. of Honduras and Mosquito G. in the W.

G. of Mexico, S. of U. S.:—
Comprising Campeachy B., in the S.W.

Chesapeake B., E. of U. S.
Fundy B., W. of Nova Scotia.
G. of St. Lawrence, S.E. of Brit. America.

Hudson's B., N. of Brit. Am.:—
Comprising James' Bay in the S.
Baffin's B., W. of Greenland.

G. of California, noted for its pearl fishery. G. of Mexico, often styled 'the Gulf,' area 800,000 sq. m.; its waters warmer than the neighbouring ocean; shores flat and sandy. Fundy B., spring-tides rise 70 ft. G. of St. Lawrence, navigation dangerous from dense fogs and floating ice; fisheries highly important. Baffin's B., visited for whale-fishing; its icebergs are floated southwards into the Atlantic.

ISLANDS.

IN THE ARCTIC O.

Greenland, N.E. of Brit. Am.
Parry Isles, W. of N. Greenland.
Banks Id., Pr. Albert Id., Pr. of Wales Id., King William Id., Cockburn I., &c., N. of the mainland.

IN THE PACIFIC O.

Queen Charlotte's I. and Vancouver I., W. of Brit. Am.

IN THE ATLANTIC O.

West India Is., S.E. of U. S.:—
Comprising the Great Antilles, (viz.:—Cuba, Jamaica, Hayti, and Porto Rico,) the Little Antilles, and the Bahamas.

Bermudas, E. of U. S.
Cape Breton I., Pr. Edward I., and Anticosti, in the G. of St. Lawrence.

Newfoundland, E. of the G. of St. Lawrence.

PENINSULAS AND ISTHMUSES.

Melville Pen., N.E. of Hudson's B. Territory.
Alaska Pen., S.W. of Alaska.
Lower California, W. of Mexico.
Yucatan, N. of Central Am.
Florida, S.E. of U. S.
Nova Scotia and Labrador, E. of British America.

Isth. of Tehuantepec, bet. Campeachy B. and the Pacific.
Isth. of Chiquimala, bet. B. of Honduras and the Pacific.
Isth. of Panama or Darien, joining N. and S. America.
Isth. of Chignecto, joining Nova Scotia and the Continent.

King William's Land,—near this, at the mouth of Back's or *Gt. Fish R.*, the *Franklin Expedition* perished in 1847-8. *W. Indies*, so called because, when discovered, they were supposed to form part of India. The *Bermudas* consist of 300 islets,—total area, 24 sq. m.; of coral formation; export arrow-root and cocoa; used by *Gt. Britain* as a naval station and penal settlement.

Isth. of Tehuantepec, 130 m. wide. The **Isth. of Panama**, 30 m. wide, is a great route to *New Zealand*, *Australia*, and *China*; a railway from *Aspinwall* to *Panama* connects the two oceans, and a ship-canal is projected. From the highest point of the *Isth.* *Balbao* discovered the *Pacific* in 1513.

EXERCISES.—Which are the land-locked seas? How are they shut in? Name the inlets on the coast of *Alaska*? To what seas do they belong? Which two *Is.* and *Gulfs* are in nearly the same lat.? Which *Gulfs* in nearly the same lon.? Which two *Pens.* are in nearly the same lat.? Which two are inclined to each other? Which *Pens.* have *Is.* as their continuations? Which of these *I. chains* belong most naturally to *N. America*? Name the principal of the *Parry Is.* Which *Is.* lie at the mouth of *Hudson's B.*, and of the *Gulfs* of *Mexico* and *St. Lawrence*? Which seas does each *pen.* separate?

STRAITS.

ON THE NORTH.

Hudson's Str., bet. *Hudson's B.* and the *Atlantic*.
Fox Chan., N.W. of *Hudson's Str.*
Davis Str., bet. *Baffin's B.* and the *Atlantic*.
Lancaster Sd., *Barrow Str.*, *Melville Sd.*, and *Bank Str.*, leading W. from *Baffin's B.*
Regent Inlet, S. of *Lancaster Sd.*
Behring's Str., bet. *Alaska* and *Asia*.

ON THE EAST.

Chan. of Yucatan, bet. *Yucatan* and *Cuba*.
Windward Passage, bet. *Cuba* and *Hayti*.
Mo'na Passage, bet. *Hayti* and *Porto Rico*.
Str. of Florida, bet. *Florida* and the *Bahamas*.
Bahama Chan., bet. the *Bahamas* and *Cuba*.
Gut of Can'so, bet. *Nova Scotia* and *Cape Breton I.*
Str. of Belleisle, bet. *Labrador* and *Newfoundland*.

Lancaster Sd., *Barrow Str.*, &c., may be described as the famous *North-West Passage*, discovered by *M'Clure* in 1851-3.

CAPES.

WEST.

C. Pr. of Wales, W. of *Alaska*.
C. St. Lucas, S. of *Lower California*.

EAST.

C. Gra'cias a Dios, E. of *Honduras*.
C. Cato'che, N.E. of *Yucatan*.
C. St. Antonio, W. of *Cuba*.

C. Sa'ble, S. of *Florida*.
C. Hatteras & C. Cod, E. of *U. S.*
C. Sa'ble, S. of *Nova Scotia*.
C. Can'so, E. of *Nova Scotia*.
C. Ray, S.W. of *Newfoundland*.
C. Race, S.E. of *Newfoundland*.
C. Charles, S.E. of *Labrador*.
C. Chidley, N.E. of *Labrador*.
C. Farewell, S. of *Greenland*.

Gracias a Dios = 'Thanks to God.' *C. Canso*, noted for shipwrecks.

EXERCISES.—Trace and name the inlets separating the *Arctic Archipelago* from the mainland. Trace other N.W. routes bet. the *Atlantic* and *Pacific* (1. from *Baffin's B.*, and (2) from *Hudson's Str.* What is the lat. (approximately) of *Capes Farewell*, *Chidley*, *Pr. of Wales*, and *St. Lucas*. What is the lon. of *C. St. Lucas*, *C. Cod*, and *Isth. of Panama*? Which are the extreme points of the mainland, N., S., E., and W.? Draw a map shewing the foregoing features.

MOUNTAINS.

SYSTEM.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
EASTERN, OF ATLANTIC, {	Appalachian or Alleghany Chain,	United States and Canada..	Mount Washing- Ft. ton, 6,428
WESTERN, OF PACIFIC, {	Rocky Mts. Chain, {	Arctic O. to Isth. of Panama, .	Vol. Popocatepetl, 17,783
	Pacific, or Oceanic Mt. Chain, . . .	W. Coast of N. America, . .	Vol. Mt. St. Elias, 14,970

The Appalachian Chain, 2,000 m. long, 150 to 200 m. broad, mean height 2,500 ft. The Alleghanies proper are in Pennsylvania and Virginia. The Rocky Mts. proper are confined to Brit. Am. and U. S., but the name is also sometimes extended to the whole Western System, which is 5,000 m. in length. The culminating point of Brit. Am. is Mt. Brown, 18,000 ft., in the Northern Range of the Rocky Mts.; of U. S., Mt. St. Helen's, 15,750 ft., in the Cascade Range; of Mexico and of the whole continent, Popocatepetl, 17,783 ft.; and of Central Am., Mt. Agua, 18,000 ft. The principal vols. are Popocatepetl, ('Mt. of Smoke,') Orizaba, ('Star Mt. ') 17,847 ft., Agua, in the Central Am. Chain, and St. Elias, in the Sea Alps of Brit. Am.

PLATEAUX AND PLAINS.

Plat. of Labrador.

Gt. Western Plateau, bet. the Rocky and the Pacific Mts.:—
Including the Gt. Basin of Utah.

Plat. of Anahuac, in Mexico.

Plat. of Guatemala, in Cen. Am.

Gt. Central Plain, bet. the Arctic O. and the G. of Mexico.

Atlantic Plain, bet. the Atlantic and the Appalachians.

The Plat. of Anahuac is 7,000 ft. high,—the Gt. Western Plat., 5,000 ft. high. The Gt. Central Plain, 3,000,000 sq. m., E. of the Mississippi, is undulating and wooded; westwards are the prairies, or meadow-lands, perfectly level, covered with grass and flowers, and roamed over by herds of bison, deer, and wild horses; while towards the Rocky Mts. is the Gt. American Desert, covered with sand, gravel, and boulders.

EXERCISES.—In what two respects do the mts. of America differ in arrangement from those of the Old World? Give the lat. and lon. of Mt. St. Elias. Point out Mts. Fairweather, Hood, Hooker, Pike's Peak, and Fremont's Peak, and give the chains they are respectively connected with. Arrange the highest smts. in the order of height, reduce the feet to m., and compare each smt. with Mont Blanc, and with some well-known height. By what mts. are the Gt. Western Plat. and the Gt. Central Pl. respectively bounded? Draw a map of N. America, shewing the Mts., Plateaux, and Plains.

RIVERS.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.
I.—NORTHERN SLOPE.				
ARCTIC BASIN				
Saskatchewan & Nelson,	Rocky Mts., .	E. & N.E.,	Hudson's B. Territory	Hudson's B.
Churchill, .	Centre of N. Plain, . . .	"	"	"
Athabasca & Mackenzie,	Rocky Mts., .	N. & N.W.,	British America, .	Arctic Ocean.

RIVERS—continued.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.	
II.—WESTERN SLOPE					
PACIFIC BASIN.					
You'con, .	Rocky Mounts.,	W.,	Alaska,	Behring Sea.	
Fraser, . .	"	W. & S.,	British Columbia, .	G. of Georgia.	
Columbia, or	}	"	S. & W.,	N.W. of U. S., . .	Pacific Ocean.
Oregon R.,					
Rio Colorado,	"	S.W.,	Upper California, .	G. of California.	
III.—SOUTHERN SLOPE.					
GULF OF MEXICO BASIN.					
Rio Grande del Norte,	Rocky Mts., .	S. E.,	Texas (U. S.), . .	G. of Mexico.	
Mississippi,	L. Itasca (Minnesota), . .	}	Centre of U. S., . .	"	
Missouri, .	Rocky Mounts.,		S. E., {	N.W. of Mississippi	{	Mississippi.
Arkansas, .	"	E. S. E.,	S. W. of	"	
Red River, .	North of Texas,	S. E.,	S. W. of	"	"
Ohio, . . .	Alleghany Mts.,	S. W.,	N. E. of	"	"
Tennessee,	"	W.,	E. of	"	Ohio. "
IV.—EASTERN SLOPE.					
ATLANTIC BASIN.					
Potomac, . .	Alleghany Mts.,	S. E.,	E. of United States,	Chesapeake B.	
Susquehanna	"	"	Pennsylvania (U. S.),	{	New " York Harbour.
Hudson, . .	New York State,	S.,	New York State, .		
St. Lawrence.	W. of L. Superior,	E. & N. E.,	Brit. Am. and U. S.,	G. of St. Lawrence.	

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
Mississippi, .	3,160	1,244,000	St. Lawrence,	2,150	400,000
Macenzie & Athabasca, }	2,300	600,000	Columbia, . .	1,200	268,000
Saskatchewan	}	490,000	Rio Grande, .	1,800	250,000
and Nelson,			Rio Colorado,	700	230,000

N. America excels every other continent in the size and extent of its lake and river systems. The networks of the different river-systems often meet or approach very closely. The rivers of the Arctic Basin are closed by ice nine months of the year, when they are traversed by the sledge of the fur hunter. Those of the Atlantic Basin are, commercially, the most important.

The Mississippi-Missouri (united, 4,328 m.) is the longest river in the world; it carries sediment to the sea every year equal to 1 sq. m. 241 ft. in depth; its delta is 15,000 sq. m. in area; and its floods rise annually from Feb. to June. The Mississippi ('Father of Waters') is remarkably clear and winding, but the Missouri ('Mud River') is very turbid and rapid, and has five Gt. Falls. The Mississippi alone is navigable 8,000 miles, and has 1,500 steamers plying on its waters; the total basin affords 86,000 m. of steam navigation. The St. Lawrence traverses the Five Great Lakes, passing under different names till it leaves L. Ontario. It is broad and rapid, and shut by ice from Dec. to Ap. Rapids and falls on its course are avoided by means of ship-canal, Bet. L. Erie and L. Ontario are the famous Falls of Niagara.

LAKES.

SYSTEM.	LAKES.	POSITION.
Northern,	Great Bear Lake, Great Slave Lake, Athabasca, Wollaston, Deer Lake, Win'nipeg, &c.,	British America.
Southern,	Superior, Huron, Michigan, Erie, Ontario,	St. Lawrence Basin.
Continental,	Chapala, Nicaragua, Leon, . . . Great Salt Lake, Lake Utah, . . .	Mexico, Central Am. Great Basin of Utah.

The Five Great Lakes contain together nearly 100,000 sq. m. L. Superior, 32,000 sq. m.—as large as Ireland.

EXERCISES.—Point out the three great watersheds of N. Am. Which rivers rise near each other? By what river routes could you most nearly cross N. Am. from N. to S., and from E. to W.? Which rivers form boundaries of countries? Arrange the rivers in the order of their length, and compare them with each other and with the Thames. Compare the largest basins with the area of the Brit. Isles. Name the river basin of each lake. Name smaller lakes in these basins. Where are the lakes most numerous, and how are they arranged? Draw a map of N. Am., shewing the Rivers and Lakes.

COUNTRIES AND CAPITALS, &c.

COUNTRIES.	AREA, Sq. m.	Pop. (Mill.)	CAPITALS.	POSITION OF CAP.	Pop. of Cap. (Thous.)
BRITISH AMERICA,	3,640,000	3½	Ottawa, &c., . .	R. Ottawa, . .	15
GREENLAND, . .	380,000	9 th.	Juliansha'ab, . .	S.W. Coast, . .	1
UNITED STATES, . .	3,390,000	32	Washington, . .	R. Potomac, . .	61
MEXICO,	857,000	8	Mexico,	L. Texcoco, . .	200
CENTRAL AMERICA,	175,000	2½	New Guatemala, }	R. Montagua, .	40
WEST INDIES, . .	86,000	4	&c., }	{ N.W. Coast }	
			Havana, &c., . .	{ of Cuba, }	197

EXERCISES.—Arrange the above countries and caps. in the order of (a) size and (b) population. Compare the countries in these respects with Gt. Britain. Which country is the most thickly populated? which the most thinly? Which of the caps. is not far from the Tropic of Cancer? Draw a map of N. America.

Climate.—The average temperature is lower than in corresponding latitudes of the Old World, and the extremes are greater. The eastern side of the continent is colder than the western; the prevailing S.W. winds carrying off the heat of the Gulf Stream, and a cold Polar current bringing down icebergs and cooled air to the eastern coasts. N. Am. is also more humid than the Old World, one-half more rain falling in tropical Am. than in tropical Africa and Asia.

PRODUCTIONS.—1. Minerals.—The New World has been celebrated for the richness and variety of its mineral wealth. Mexico and Central Am. were long famous for the precious metals, but California and Brit. Columbia are now the chief gold-fields of Am.

Copper, tin, lead, iron, and coal are also very abundant and widely distributed; the largest coal-field in the world being in the U. S., in the Appalachian district, and the richest copper region lying N. and E. of L. Superior.

2. Vegetables.—The eastern part of this continent, when discovered, was one vast continuous forest, which has even yet been only partially cleared, while from the Mississippi towards the Rocky Mts. extend vast prairies, destitute of trees and covered with tall grasses.

The forest trees are of numerous species and enormous size. Among the more characteristic plants of N. Am. are *azaleas*, *magnolias*, *fuchsias*, *dahlias*, and *rhododendrons*, and the *cactus* tree is peculiar to the New World.

To America Europe is indebted for *Indian corn*, *cocoa*, *manioc*, the *potato*, and the *tobacco* plant; whilst Am. has derived from the Old World most of the *grains*, *rice*, *sugar-cane*, *coffee*, *cotton*, and the *bread-fruit* tree.



SUGAR PLANTATION.

3. Animals.—The animals of the New World are inferior in number of species, size, and strength to those of the Old, though some of them are of analogous types—such as the *puma*, the *jaguar*, the *condor*, and the *alligator*, which respectively represent the *lion*, the *tiger*, the *eagle*, and the *crocodile* of the Old World.

Other beasts of prey are the *wolf* and three varieties of the *bear*. The *monkeys* are small, and furnished with prehensile tails. The largest native quadrupeds are the *elk*, *musk-ox*, *reindeer*, and *bison*. Fur-bearing animals, such as the *beaver*, *musk-rat*, and *ermine*, are abundant in the N. The *humming-bird* is indigenous, while *pigeons* in flocks darken the air during their migrations. While Europe has borrowed the *turkey* from Virginia, (U. S.,) Am. is indebted to Europe for the *horse*, *ox*, and other domestic animals.

PEOPLE.—The pop. consists chiefly of three races, viz.:—(1.) The Red Indians or Aborigines; (2.) Negroes, brought originally as slaves from Africa; (3.) Caucasians, or Whites, of European descent, chiefly British, French, Spanish, and German. There is also a mixed race from the union of these three. The Esquimaux of Arctic Am. are of the Mongolian race, and few in number.

The European pop. consists of about $\frac{2}{3}$ of the whole, and the Indians and Negroes are nearly equal. The Red Indians are now chiefly confined to the Western territories, remaining uncivilized, and are fast disappearing. The Negroes are now at length freed from slavery, except in the Spanish W. Indies. Am. was discovered by Columbus in 1492, since which period there has been a ceaseless tide of emigration from Europe. Mexico was conquered and colonized by Spain; U. S. by Britain; and Canada by France and Britain.

Language.—The original languages are termed polysynthetic, i. e., consisting of peculiarly complex forms of words, as, for example, the word *amattacuiloliticatlaxtlahuilli*, signifying “the reward given to a messenger who bears a hieroglyphic map conveying intelligence.” English prevails in Brit. Am. and U. S., and Spanish in Mexico and Central Am.

Religion, &c.—Protestantism, under various forms, and Roman Catholicism are found in the U. S. and Brit. Am., but the countries of Spanish colonization retain the R. C. faith. The Red Indians are still pagans. The Gov. is republican, except in Brit. Am., which is colonial. Most of the W. India Is. belong to European powers, and Greenland is a possession of Denmark.

EXERCISES.—Which parts of N. Am. belong to the region of constant rains? Which to the rainless regions? From the data above and formerly given, state the numbers of Caucasians, Indians, and Negroes. Draw a map of N. Am., shewing the distribution of Races, Languages, and Religions.

SOUTH AMERICA.

Boundaries.—N., the Caribbean Sea; W., the Pacific O.; E., the Atlantic.

General Aspect.—S. America is of triangular form, with apex to the S. Its surface may be regarded as a continuation of that of N. America, interrupted only by the G. of Mexico and the Caribbean Sea: viz., a great Central Plain, with the colossal chain of the Andes on the W., and the secondary ranges of Brazil on the E. This great Central Plain exhibits the three vast river-basins of the Orinoco, the Amazon, and the Parana or La Plata, affording the most extensive system of inland navigation in the world, and thus, to a certain extent, compensating for the deficiency of coast-line.

COUNTRIES OF S. AMERICA.

Brazil.	Ecuador.	La Plá'ta or Ar'gen-
Guia'na.	Pern'.	tine Republic.
Venezue'la.	Bolivia or Upper	Paraguay.
Grana'dian Confed-	Peru.	Uruguay.
eration.	Chili.	Patago'nia.

EXERCISES.—From what continents is S. Am. separated by the Atlantic and the Pacific? Give their nearest points and their distance. Compare the area with that of the whole land-surface of the globe. Compare its surface with that of N. Am. Which mts. and plains in each correspond? Which meridian most nearly traverses the whole length of S. Am.? Which parallel its greatest breadth? Name all the boundaries of each of the countries. Arrange the countries according to Zones.

SEAS, GULFS, &C.

CARRIBBEAN SEA.	G. of Guayaquil, W. of Ecua-
G. of Paria, N.E. of Venezuela.	dor.
G. of Maracay'bo, N.W. of Venezuela.	ATLANTIC O.
G. of Da'rien, N.W. of Granadian Confederation.	G. of St. George, and G. of San Matias, E. of Patagonia.
PACIFIC O.	Rio' de la Plá'ta, S. of Uruguay.
B. of Panamá', S. of Isth. of Panama.	Estuary of the Amá'zon, N.E. of Brazil.

G. of Paria,—its S. entrance called the Serpent's Mouth; N. entrance, the Dragon's Mouth. B. of Panama has pearl-fisheries.

ISLANDS.

PACIFIC O.	Tier'ra del Fue'go, S. of Patagonia.
Galapá'gos Is., W. of Ecuador.	ATLANTIC O.
Chin'cha Is., W. of Peru.	Falk'land Is., S.E. of Patagonia.
Ju'an Fernan'dez, W. of Chili.	S. Georgia, S.E. of Falkland Is.
Chil'oe, Wellington, and Má'dre de Dí'os Archipel'ago, W. of Patagonia.	Joan'nes or Mará'jo, N.E. of Brazil.

Galapagos, ("Turtle Islands,") volcanic; birds and reptiles peculiar. Chincha Is. have immense deposits of guano. Juan Fernandez, the residence for four years (1704-8) of Alexander Selkirk, the original of 'Robinson Crusoe.' Chiloe, pronounced *Cheel'oo-ay*. Tierra del Fuego, ('Land of Fire,') an archipelago, with many active vols.; the natives are of the lowest scale of humanity. Falkland Is., two large and 200 small Is.; ships call for provisions and fresh water.

STRAITS.

Str. of Magel'lan, bet. Patagonia and Tierra del Fuego.	Str. of Le Maire, bet. Tierra del Fuego and Staten Island.
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CAPES.

Point Gallí'nas, N.E. of Granadian Confederation.	C. Horn, S. of Tierra del Fuego.
C. Fro'ward, S. of Patagonia.	C. St. Roque', N.E. of Brazil.
	C. Fri'o, S.E. of Brazil.

C. Horn the most celebrated cape in the New World,—‘a lofty, steep, bare, black rock, with pointed summits,’—so named by its discoverer, Schouten, after his birthplace, *Hoorn*, in Holland.

EXERCISES.—Point out three pens. on the N. coast, two in Patagonia, and one in Brazil. Which Is. are on, and which near, the Eq.? Which are at river-mouths? Which part of the coast is most indented? and which coast in Europe does it most resemble? Which are the extreme points of the mainland of S. Am.—N., S., E., and W.? Which is near the Tropic of Capricorn? Draw a map shewing foregoing features of Outline.

MOUNTAINS.

SYSTEMS.	CHIEF RANGES.	POSITION.	HIGHEST SUMMITS.
			Ft.
WESTERN,	The Andes, . . . {	Isth. of Panama to C. Horn, . . . {	Aconcag'ua, . . . 23,910
EASTERN, {	Brazilian Mounts., . . . {	E. of Brazil, . . . {	Itam'be' (Sier'ra Espinhaço), . . . 5,960
	Parimé and Guiana Mountains, . . . {	S. of Venezuela and Guiana, . . . {	Maravá'ca, . . . 10,500

The Andes, length 4,500 m., breadth 40 to 400 m., mean height 11,850 ft., cover $\frac{1}{3}$ of the surface of S. Am. They extend at a distance of 20 to 160 m. from the Pacific. Bet. their parallel ranges are plateaux of great elevation. They excel every other chain in the number and grandeur of their vols., and no part of the globe is so subject to destructive earthquakes. They comprise five great divisions, viz.:—

- | Highest smts. | |
|---|-------------------------|
| 1. The Andes of Quito, (3 parallel ranges,) . . . | Chimborá'zo, 21,424 ft. |
| 2. The Andes of Peru, . . . | Vilcano'ta, 17,525 " |
| 3. The Andes of Bolivia, (2 . . .) | Sorá'ta, 21,190 " |
| 4. The Andes of Chili, (1 range,) . . . | Aconcag'ua, 23,910 " |
| 5. The Andes of Patagonia, (1 range,) . . . | Yante'les, 8,030 " |

PLATEAUX AND PLAINS.

Plat. of Qui'to, 9,600 ft. high.	The Pam'pas of La Plata in the S.
Plat. of Bolivia, 12,900 "	
Plat. of Brazil, 3,000 "	Desert of Patago'nia, in the E.
Gt. Central Plain, comprising—	El Gran Chá'co or Gt. Desert, W.
The Llá'nos of the Orinoco in the N.;	of the R. Paraguay.
The Sel'vas of the Amazon, in the Middle;	Desert of Atacá'ma, N. of Chili.

Plat. of Quito, (pronounced *Ket-to*.) 200 m. by 30 m., is surrounded by the most splendid series of vols. in the world, Cotopaxi being the most dreaded. The Llanos are immense level tracts, covered with luxuriant grass or drifting sands; the Selvas are densely wooded plains (more than six times the size of France); the Pampas are covered with clover and thistles ten feet high, or with long tufted grass. Over the llanos and pampas roam vast herds of horses and wild cattle. The Desert of Patagonia is a series of terraced plains covered with shingle. El Gran Chaco and Desert of Atacama are wastes of sand; the latter rainless.

EXERCISES.—How do the mts. of Am. differ in general direction from those of the Old World? Which capes are the extremities of mt.-chains? Where do the E. and W. systems most nearly meet? Compare the highest smt. of the New World and that of the Old. What is the lon. of Aconcagua? Which peaks are nearly under the Eq.? Name from the map other peaks in each of the divisions of the Andes. Arrange the highest smts. in the order of their height, reduce the ft. to m., compare them with Mt. Blanc and with some well-known height. Draw a map of S. Am. shewing the Mts., Plains, and Plateaux.

RIVERS.

RIVER.	RISES IN.	FLOW.	THROUGH.	FALLS INTO.
I.—NORTHERN SLOPE.				
CARIBBEAN BASIN.				
Magdale'na,	{ Andes near Ecuador, }	N.,	Granadian Confed.,	Caribbean Sea.
II.—EASTERN SLOPE.				
ATLANTIC BASIN.				
Orino'co, .	Parimé Mts., .	W., N., & E.	Venezuela,	Atlantic.
Am'azon, .	Andes of Peru,	E.,	{ Peru, Ecuador, and Brazil,	"
San Fran- cis'co, }	S.E. of Brazil, .	N. & E.,	East of Brazil, . .	"
III.—SOUTHERN SLOPE.				
ATLANTIC BASIN.				
Paraná', .	S.E. of Brazil, .	S.W. & S.,	{ Brazil, Paraguay, La Plata, &c., }	Río de la Plata.
Paraguay',	W. " .	S.,	{ Brazil, Paraguay, La Plata, &c., }	Parana.
Uruguay',	S. " .	W. & S.,	{ Brazil, Uruguay, and La Plata, }	Río de la Plata.

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
Amazon, . .	4,000	2,000,000	Orinoco, . .	1,200	837,000
La Plata (Far- ana, &c.), }	1,800	1,200,000	San Francisco,	1,630	250,000

TRIBUTARIES.

Amazon, { l. b.—Na'po, Putuma'yo, Japu'ra, and Ne'gro;
r. b.—Ucayá'lé, Javá'ry, Pu'rús, Made'ra, Tapá'jos, Xin'gu, with the
Tocantins' and Araguay' united.

Parana,—l. b.—Paraguay' (with sub-affluents, Pilcoma'yo and Verme'jo) and
Salá'do.

LAKES.

L. Maracay'bo, N.W. of Vene- | L. Titicá'ca, on the Plat. of Bolivia.
zuela. | L. Guanacá'che' and L. Silve'ro
La'go dos Pa'tos, S. of Brazil. | in La Plata.

The Amazon, or Orellá'na, (above the entrance of the Río Negro, called the Solimões', and higher up the Mar'anon,) is the largest river of the globe for basin and volume. Its basin affords 50,000 m. of navigation, having more than 20 tribs., each navigable 1,000 m. The channel is 4. m. wide for 450 m. above its mouth, whose width is 50 m., and the current remains fresh 200 m. out at sea. L. Titicaca, 12,850 ft. above the sea, the second highest lake in the world.

S. Am. is singularly destitute of lakes of large size, and no permanent ones belong to the great river-systems; but many swamps and large lakes are formed in the rainy season, and in La Plata are numerous salt-lakes. The Plat. of Bolivia forms a Basin of Continental Streams.

EXERCISES.—Which is the chief water-shed of S. Am.? Point out the water-sheds separating the three chief river-basins. Which rivers of these different basins most nearly meet? Which two are completely joined? and how? How could you most nearly pass by water from the mouth of the Orinoco to the Rio de la Plata? Which rivers form boundaries of countries? Arrange the rivers in the order of length, compare them with each other, and with the Thames. Compare the largest basins with the area of the Brit. Is. Draw a Map shewing the Rivers and Lakes of S. Am.

COUNTRIES AND CAPITALS.

COUNTRIES.	AREA. (Sq. m.)	POP. (Mil.)	CAPITALS.	POSITION OF CAP.	POP. OF CAP. (Thous.)
BRAZIL,	3,138,000	7½	Rio' de Janeiro, . .	S.E. Coast, . .	400
BRITISH GUIANA, . .	76,000	1/7	George'town, . .	R. Demerara, . .	25
DUTCH GUIANA, . .	38,500	1/9	Paramari'bo, . .	R. Surinam', . .	16
FRENCH GUIANA, . .	21,500	25th.	Cayen'ne,	I. of Cayen'ne, .	6
VENEZUELA,	427,000	1½	Carao'cas,	Near N. Coast, .	50
GRANADIAN CONFED.	522,000	2½	Bogo'ta,	R. San Francisco, .	43
ECUADOR,	285,000	1	Quito,	Plat. of Quito, . .	76
PERU,	509,000	2½	Lima,	Near W. Coast, .	70
BOLIVIA,	510,000	2	Chuquisa'ca, . . .	R. Pilcomayo, . .	24
CHILI,	116,000	1½	Santiá'go,	R. Maypo'cho, . .	115
LA PLATA,	543,000	1½	Bue'nos Ay'res, . .	Rio de la Plata, .	120
PARAGUAY,	75,000	1½	Asun'cion,	R. Paraguay, . .	8
URUGUAY,	72,000	2	Mon'te Vid'eo, . .	Rio de la Plata, .	45
PATAGONIA,	300,000	2/5	Punta Are'nas, . .	Str. of Magellan, .	..

EXERCISES.—Arrange the above countries and caps. in the order of (a) size and (b) pop. Compare the countries in these respects with Gt. Britain. Which country is most thickly peopled? Which most thinly? Which two caps. are nearest each other, and how far are they apart? Which is near the Eq.? Which near the Tropic of Capricorn? What relation does Brazil hold to the rest of S. Am. in respect to size and pop.? Draw a map of S. Am.

Climate.—Two-thirds of the continent lying within the Tropics, the climate is necessarily hot, but the high mt.-ranges and plateaux have the effect of reducing the general temperature. While the palm flourishes in the N., deep snow mantles the ground many months of the year in the S. The E. coast is warmer than the W.,—the Antarctic Drift Current cooling the shores of Chili and Peru. The moisture is greatest in the N., and greater on the E. than on the W. side of the Andes, where the narrow sea-board is almost rainless.

PRODUCTIONS.—1. **Minerals.**—The whole chain of the Andes is richly metalliferous, more especially in Peru, Bolivia, and Chili, while Brazil is unsurpassed for diamonds and other precious stones, as well as metals.

Besides gold and silver, the useful metals, iron, tin, lead, copper, coal, mercury, sulphur, and salt, are abundant, and widely distributed.

2. **Vegetables.**—From the great heat and moisture, the vegetable kingdom displays here, especially in the basins of the Amazon and Orinoco, the richest variety and profusion. The primeval

forests of vast extent consist of trees of many different orders and immense size, clothed with climbing and parasitical plants, and are so dense that the explorer has to hew a pathway at every step; and, but for the larger intervening rivers, the monkeys might travel hundreds of miles without descending to the ground.

The forest trees are palms of different species,—tree-ferns, mahogany, log-wood, Brasil-wood; and the medicinal Peruvian bark is found on the higher slopes of the Andes. Cacao, manioc, caoutchouc, and maize, are here indigenous; but other objects of culture have been introduced from Europe.



THE PUMA.

3. **Animals.**—Most of the animals of S. Am. are peculiar to it. The principal wild animals are the jaguar and puma; the tapir and peccary, or American hog; the sloth, ant-eater, and armadillo; opossums and monkeys; the condor, (the largest of rapacious birds,) found on the Andes S. of the Eq.; the rhea, or American ostrich, parrots, and humming-birds. The llama and alpaca (of the same order of ruminants as the camel) are confined to the Andes of Chili and Peru, and are wool-bearing animals.

When S. Am. was discovered, the llama was the only domesticated animal, and was used as a beast of burden; but horses and oxen were introduced, and now roam wild in countless herds in the Pampas. Insect species are innumerable, especially in hot swampy districts, the principal being centipedes, scorpions, and mosquitoes, the torment alike of man and beast, while fire-flies light up the woods by night.

PEOPLE.—The pop. consists of the same races as those of N. Am.,—viz., Indians, or Aborigines, Negroes, and Whites, together with a Mixed Race formed from the union of these three.

The Aborigines and mixed races are the most numerous, and Negroes form one-half of the pop. of Brazil. The eastern portion of the continent was colonized by the Portuguese, and the western by the Spaniards.

Religion, &c.—The religion is R. C., except among the Aborigines who practise Fetichism. The form of gov. is republican in all the states except Guiana, which is colonial, and Brazil, which is an Empire.

EXERCISES.—Which countries of S. Am. have continuous rains? Which winds bring the rains to the countries E. of the Andes. Which of the Vegetables and Animals mentioned above are also found in other continents? and in which continents? Draw a map of S. Am., shewing the Distribution of Races, Religions, and Productions.

OCEANIA.

Oceania comprises all the islands and archipelagoes of the Pacific, from the S.E. coast of Asia to the W. coast of America.

Extent—From 28° N. Lat. (Bonin Is.) to 56° S. Lat., (Macquarie I.;) and from 95° E. Lon. (Sumatra) to 110° W. Lon. (Eastern I.)

GENERAL DIVISIONS.

- I. Australasia, or Melanesia, in the S.W., bet. the Indian O. and the Pacific;
- II. Malaysia, or E. Indian Is.; in the N.W. bet. Further India and Australia.
- III. Polynesia, in the E.,—including Micronesia, N. of the Eq.

AUSTRALASIA.	MALAYSIA.	POLYNESIA, &c.
Australia.	Sun'da Is.,—viz.,	Caroline Is.
Tasmania.	Sumatra, Java, &c.,	Sandwich Is.
New Zealand.	Borneo, Celebes,	Navigator's Is.
Papua.	Moluccas or Spice Is.,	Friendly Is.
New Caledonia, &c.	Philippine Is., &c.	Marquesas, &c.

Australasia, (*i. e.*, 'South Asia,') called Melanesia from the black colour of the Aborigines, has its centre, Australia, surrounded on the E. by the other portions in the form of a crescent. The name is sometimes restricted to Australia, Tasmania, and New Zealand, and the name **Melanesia** applied to the other Is. of the group.

Malaysia, so called from the Malay pop. who inhabit it, extends from N.E. to S.W., with its largest Is. nearest Asia. It is the largest assemblage of Is., and belongs to the greatest volcanic region of the world.

Polynesia ('the region of many islands') has its greatest length from N.W. to S.E., and is composed exclusively of small Is. of coral formation. The name is sometimes restricted to the groups S. of the Eq., while **Micronesia** ('the region of little islands') is applied to those in the N.W., lying N. of the Eq.

EXERCISES.—What separates Asia from Oceania? Through how many degrees of lat. and lon. does Oceania extend? Compare area and pop. with those of Gt. Britain. Give the length and breadth of each of these great divisions. Which is nearly bounded by the Tropics? Which is intersected by the Eq.? Which by the Tropic of Capricorn? Which is most remote from Britain, and how far? Point out the shortest route to it. How do the larger Is. of Australasia lie from Australia? Which is the central I. of Malaysia? How do the other Is. lie from it? Which of the divisions is composed of *continental* Is.? Which of *oceanic* Is.? Draw a map shewing the relative positions of these great divisions of Oceania.

TABLE OF THE FOREIGN POSSESSIONS OF EUROPEAN POWERS.

EUROPE.	ASIA.	AFRICA.	AMERICA.	OCEANIA.	TOTAL AREA.*	TOTAL POP.*
Heligoland, Gibraltar, Malta, and Gozo.	British India, Protected States in India, Ceylon, Hong-Kong, Aden (Arabia).	Gambia, Sierra Leone, Gold Coast, Lagos, Elmina; St. Helena and Ascension; C. Colony, Natal; Mauritius, Annam, & Seychelle Is.	Great Britain. Brit. America, Bermuda, Brit. Honduras, Bahamas, Jamaica, Trinidad, &c., in the W. Indies; Brit. Guiana, Falkland Is.	Australia, Tasmania, New Zealand, Auckland Is., Norfolk I., Labuan (off Borneo).	Sq. m. 8,480,000	195,000,000
Area, 121 sq. m. Pop., 168,000.	Area, 1,500,000 sq. m. Pop., 138,000,000.	Area, 150,000 sq. m. Pop., 15,000.	Area, 3,718,000 sq. m. Pop. 4,660,000.	Area, 3,118,000 sq. m. Pop., 1,233,000.		
			SWEDEN. I. of St. Bartholomew, (W. Indies.)		85	10,000
			DENMARK. W. Coast of Greenland; St. Croix, St. Thomas, and St. John, in the W. Indies. Area 4,000 sq. m. Pop. 48,000.		44,000	124,000
Faroe Isles and Iceland.						
Area, 40,000 sq. m. Pop., 76,000.						
			HOLLAND. Curaçao, Buen Ayre, St. Eustatius, Saba, and S. part of St. Martin (W. Indies), Dutch Guiana.	Settlements in Borneo, Celebes, Sunda Is., Spice Is.	685,600	19,659,000
			Area, 10,600 sq. m. Pop., 120,000.	Area, 615,000 sq. m. Pop., 19,452,000.		

* Areas and Pop. are given in round numbers.

TABLE OF THE FOREIGN POSSESSIONS OF EUROPEAN POWERS—continued.

ASIA.	AFRICA.	AMERICA.	OCEANIA.	TOTAL AREA.	TOTAL POP.
Lower Cochín China: Chan-damagore, Pondicherry, Karikal, Yanam, and Mahe, (Hindustan.) Area, 11,000 sq. m. Pop., 2,221,000.	Algeria; Senegal, Goree, &c.; Bourbon, St. Marie, and Nossi Bé, (off Madagascar); Mayotte (Comoro Is.) Area, 249,000 sq. m. Pop., 3,256,000.	FRANCE. French Guiana; Martinique, Guadeloupe, &c., (W. Indies); St. Pierre and Miquelon, (off Newfoundland). Area, 70,000 sq. m. Pop., 300,000 sq. m.	New Caledonia; Tahiti, (Society Is.); Wallis & Gambia Is., Marquesas Is., &c. Area, 10,000 sq. m. Pop., 85,000.	840,000	5,862,000
	Centa, Tetuan, &c. (in Morocco); Fernando Po and Annabona, &c. Area, 1,500 sq. m. Pop. 35,000.	SPAIN. Cuba, Porto Rico, part of the Virgin Is., (W. Indies). Area, 53,250 sq. m. Pop., 1,832,000.	Part of Philippine and Ladrones, or Marianne, Is. Area, 53,250 sq. m. Pop., 2,680,000.	108,000	4,547,000
Goa, Salsette, Damaun, Diu, &c. (in Hindostan); Macao, (off China.) Area, 1,500 sq. m. Pop., 438,000.	C. Verd Is., parts of Senegambia, Angola, Benguela, Mozambique; St. Thomas and Principe. Area, 528,500. Pop., 2,400,000.	PORTUGAL.	Parts of Timor, Mindora, and Solor, (E. Indian Is.) Area, ? sq. m. Pop., 850,000.	650,000	3,688,000
Turkey-in-Asia, and part of Arabia. Area, 670,000 sq. m. Pop., 16,060,000.	Egypt, Nubia, &c.; Tripoli and Tunis, &c. Area, 953,000 sq. m. Pop., 5,660,000.	TURKEY.		1,625,000	21,700,000
Siberia and Trans-Caucasia.		RUSSIA.		6,728,000	8,000,000

EXERCISES.—Which countries of Europe have no Foreign Possessions? Arrange the above in the order (1) of size and (2) of pop. What proportion does each bear to the mother country in these respects? Arrange the possessions of each country in the order of their size, according to the above classification.

THE BRITISH ISLES.

The British Isles, or United Kingdom of Great Britain and Ireland, form an archipelago to the W. of Central Europe consisting of about 5,500 islands and rocks, of which only about 420 are inhabited. The two largest islands are Great Britain and Ireland, once forming the three separate and independent kingdoms of England, Scotland, and Ireland, but now united under one government and with one united Parliament, although still possessed of distinct laws and institutions.

I.—ENGLAND AND WALES.

Boundaries.—N., Scotland; W., Irish Sea, St. George's Chan., and Atlantic; S., the English Chan.; E., the North Sea.

Extent.—Greatest length, 420 m.; greatest breadth, 360 m.; area, 58,320 sq. m., (including Wales, 7,340 sq. m.); coast-line, 2,000 m.

General Aspect.—England is of triangular form. Its shores are much indented, especially in the W., where they are also boldest, forming numerous natural harbours protected by prominent headlands. The surface is greatly diversified: low and level in the S.E., undulating in the centre, and mountainous towards the W., especially in Wales and Cumberland. The drainage of the country is divided by an almost continuous water-shed, "the Back-bone of England," running N. and S. But besides the slopes thus formed, a narrow tract along the S. drains into the English Channel.

EXERCISES.—What separates England from Scotland? from Ireland? from France? How far are the nearest points of Ireland and France from England? Which countries lie due E. and W.? Point out the line of greatest breadth? Which meridian shews the mean length? Which parallel the least breadth?

COUNTIES IN ENGLAND—40.

NORTHERN COS.—6.		WESTERN COS.—4.	
Northum'berland.	Cum'berland.	Mon'mouth.	Shrop'shire.
Dur'ham.	West'moreland.	Her'eford.	Chesh'ire.
York.	Lan'cashire.	MIDLAND COS.—15.	
EASTERN COS.—5.		(N. Midland.)	
Lin'coln.	Suff'olk.	Der'by.	Leice'ster.
Cam'bridge.	Es'sex.	Not'tingham.	Rut'land.
Nor'folk.		Staff'ord.	
SOUTHERN COS.—10.		(S. Midland.)	
Kent.	Wilt'shire.	Worce'ster.	Ox'ford.
Sur'ey.	Dor'set.	War'wick.	Buck'ingham.
Sus'sex.	Som'er'set.	Northamp'ton.	Bed'ford.
Berk'shire.	Dev'on.	Hunt'ingdon.	Her'eford.
Hamp'shire.	Corn'wall.	Glouce'ster.	Mid'dlesex.

COUNTIES IN WALES—12.

NORTH WALES—6.

Flint.	Anglesea.
Denbigh.	Merioneth.
Caernarvon.	Montgomery.

SOUTH WALES—6.

Cardigan.	Glamorgan.
Pembroke.	Brecknock.
Caermarthen.	Radnor.

The counties are divided into more than 18,000 parishes. The largest co. is York, (5981 sq. m.) the smallest Rutland, about $\frac{1}{40}$ of York. **Middlesex**, the next smallest, is $\frac{1}{21}$ of York. **Yorkshire** has three divisions, viz.:—the N., E., and W. Ridings. The S. of Lincoln is named 'Holland,' from its resemblance to that country; a part of Cambridge is named the 'Isle of Ely;' and another part of the Fens reclaimed from the Wash, between Lincoln and Norfolk, is called 'Victoria County.' **Wales** generally, **Cumberland**, **Westmoreland**, and **Derby**, are famous for fine mountain scenery: **Cumberland** and **Westmoreland** are known as the 'Lake Country.' **Anglesea**, **Pembroke**, and **Wilts**, have Druidical remains; **Monmouth**, British and Roman ones. **Nottingham** (or **Notts**) has the remains of Sherwood Forest, the haunt of the famous outlaw, **Robin Hood**. **Oxford**, **Berks**, and **Surrey**, abound with seats of the nobility and rich citizens of London. **Hampshire** (or **Hants**) has the New Forest, the largest of the royal forests now remaining.

EXERCISES.—Which meridian nearly coincides with the Welsh border? What forms the N. boundary of the Southern Cos.? Which co. is the most central? Which is surrounded by nine cos.? Name these nine in order. Name in order the cos. that surround **Middlesex**, **Warwick**, and **Derby**. Which cos. have portions detached? Name the cos. traversed by lines drawn from London to **Liverpool**, and from **Norfolk** to **Land's End**.

BAYS, &c.

IN THE IRISH SEA.

Solway Firth, bet. **Cumberland** and **Scotland**.
Morecambe B., N. W. of **Lancashire**.

IN ST. GEORGE'S CHAN.

Caernarvon B., W. of **Caernarvon**.
Cardigan B., W. of **Merioneth** and **Cardigan**.
St. Bride's B. and **Milfordhaven**, W. of **Pembroke**.

IN THE ATLANTIC.

Bristol Chan., S. of **Wales**.
BRANCHES—**Caermarthen B.** and **Swansea B.**, on the N.; **Bridge-water B.** and **Bidford B.**, on the S.

IN THE ENG. CHAN.

Mount's B. and **Falmouth Har.**, S. W. of **Cornwall**.
Plymouth Sd., S. W. of **Devon**.

IN THE NORTH SEA.

The Downs, bet. **Kent** and **Goodwin Sands**.
Mouth of the Thames, bet. **Essex** and **Kent**.
Yarmouth Roads, E. of **Norfolk**.
The Wash, bet. **Lincoln** and **Norfolk**.
Hummer Mouth, bet. **York** and **Lincoln**.
Bridlington B., E. of **York**.

The **Solway**, **Morecambe B.** (pron. *More'-cam*), and **Bristol Chan.** have high and rapid tides. **Milfordhaven**, the largest and finest harbour in Britain—could contain the whole British navy. **Plymouth Sd.** has a breakwater across its mouth, 1 m. in length; 11 m. S. is the famous **Eddystone Lighthouse**. The **Downs**—a roadstead affording valuable shelter to shipping from the **Goodwin Sands**, the most dangerous quicksands known. The **More** is that part of the **Thames Estuary** between **Sheppey I.** and **Essex**.

ISLANDS.

WEST COAST.

Isle of Man, in the Irish Sea.
 An'glesea and Holyhead', N.W.
 of Caernarvon.
 Scilly Isles, S.W. of Cornwall.

SOUTH COAST.

I. of Wight, S. of Hampshire.
 Chan'nel Isles, viz.:—Jersey,

Guern'sey, Alderney, and
 Sark, N.W. of France.

EAST COAST.

Shep'pey I., N. of Kent.
 I. of Than'et, N.E. of Kent.
 Holy I., or Lindisfarne, and
 Farne Is., N.E. of Northum-
 berland.

I. of Man, inhabited by the Manx, a Celtic race, who speak the Manx language; has a separate gov. and a parliament of 24 members, termed the 'House of Keys.' Scilly Is., (pron. *Silly*.) 140 islets and rocks, only 6 inhabited—principal, St. Mary's. I. of Wight, termed, from its beauty, the 'Garden of England.' The Channel Is. are the only remnant of the Norman possessions of England; the natives speak Norman-French, and have a separate gov. Farne Is., 17 in number—the scene of Grace Darling's heroic rescue of the passengers of the 'Forfarshire' steamer in 1838. I. of Portland and I. of Purbeck, are peninsulas in Dorset; the former is famous for building stone; the latter supplies fine clay for the Staffordshire potteries.

CAPES.

WEST COAST.

Point of Ayr, N. of I. of Man.
 St. Bee's Hd., W. of Cumber-
 land.
 Gt. Orme's Hd., N.W. of Caer-
 narvon.
 Brach-y-pwll, S.W. of Caernar-
 von.
 St. David's Hd., W. of Pem-
 broke.
 Hartland Pt., N.W. of Devon.

SOUTH COAST.

Land's End and Lizard Pt.,
 S.W. of Cornwall.
 Start Pt., S. of Devon.
 The Needles, W. of the I. of Wight.
 Beachy Hd., S. of Sussex.

EAST COAST.

Dungeness, S. and N. Foreland,
 E. of Kent.
 Spurn Hd. and Flam'borough
 Hd., E. of York.

STRAITS.

Me'nai Str., bet. Caernarvon and
 Anglesea.

The Solent and Spithead', bet.

Hampshire and the I. of
 Wight.

Str. of Dover, bet. Kent & France.

Brach-y-pwll, pron. *Brack-e-pool*. The Needles are five sharp rocks rising out of the water. Me'nai Str., crossed at Bangor by the Me'nai Suspension Bridge and the Britannia Tubular (Railway) Bridge. Spithead has fine anchorage; principal rendezvous of the British navy.

EXERCISES.—Name other four large estuaries on the W. Which cos. border on Bristol Chan.? Point out other four inlets on the S. coast. Name other five small Is., and give their positions. Point out all the pens. on the map of England. Name the extreme points of England, E., W., and S. Which two capes are at the mouth of Cardigan B.? of Bristol Chan.? of Caernarvon B.? of Mount's B.? Point out four capes on the S. coast not named in the text. Which capes are most nearly due E. and W. and N. and S. of each other. Draw a map shewing the foregoing Outlines.

MOUNTAINS.

I.—THE NORTHERN SYSTEM—in the Six Northern Cos.

Highest smts.

1. Che'viot Hills, bet. Eng. and Scotland: Cheviot Peak, 2,688 ft.

Highest smts.

2. **Pen'nine Chain**, fr. the Cheviots to Derby: **Cross Fell**, 2,927 ft.
 3. **Cumbrian Mts.**, in Cumberld. & Westmoreld.: **Scā'fell**, 3,229 ft.
 Outlying Heights: the **Wolds**, in York and Lincoln, 1,485 ft.

II.—THE CAMBBIAN SYSTEM—in Wales.

Chief Summits:—**Snow'don**, 3,590 ft., in Caernarvon; **Cad'er Id'ris**, in Merioneth; **Plynlim'mon**, in S.W. of Montgomery; **Radnor Forest**, **Beacons of Brecknock**, &c.

Outlying Heights: The **Wre'kin**, in Shropshire; **Mal'vern Hills**, bet. Hereford and Worcester.

III.—THE DEVONIAN, or SOUTH-WESTERN SYSTEM, from Worcester to Land's End.

Cotswold Hills, in Gloucester.

Men'dip Hills, in Somerset.

Exmoor Hills, in Devon & Somerset.

Dartmoor Hills, in Devon.

The **Cor'nish Mts.**, in Corn-wall.

SECONDARY OR LATERAL RANGES.

These strike off from the Devonian Ranges, and are of trifling elevation:—

1. **Chil'tern Hills**, in Oxford and Bucks; **Gog'magog Hills**, E. of Cambridge.
2. The **North and South Downs**, from Salisbury Plain in Wilts running eastwards—the N. Downs in Hants, Surrey, and Kent; the S. Downs in Hants and Sussex.

The **Pennine Chain**, 270 m. in length, includes the **Peak** in Derby, which is not a single height, but a widespread mountainous district. Other mts. of the Pennines:—**Bowfell**, in Westmoreland; **Wharfedale**, **Ingleborough**, **Pennygant**, in N.W. of York. **Cumbrian Mts.**, 35 m. by 35 m.; other smts.—**Helvellyn** and **Skiddaw**, above 3,000 ft. **Snowdon** is 40 m. in circuit at the base. **Plynlimmon** gives rise to five rivers. The **South-Western System**, except in Devon and Cornwall, are of chalk formation; they afford no minerals, but excellent pasture for sheep. The Stewardship of the **Chiltern Hundreds** is the nominal office to which M.P.'s are appointed if they wish to resign their seats.

PLAINS.

Cumbrian Pl., in Cumberland.

Cheshire Pl., in Cheshire and S. Lancashire.

Yorksh. Pl., in the W. Riding.

Central Pl., in the Midland Cos.

The Fens, around the Wash.

Eastern Pl., in Norfolk, Suffolk, and Essex.

Salisbury Pl., in Wiltshire.

Exmoor, (Plat.,) N. of Devon.

Dartmoor, (Plat.,) S. of Devon.

The Weald, bet. the N. and S. Downs.

The **Central Pl.** is bounded by the four large rivers, Trent, Severn, Thames, and Ouse. The **Fens**, or Bedford Level, (50 m. by 20 to 30 m.,) partially reclaimed by the Earl of Bedford, in the 17th century, by pumping out the water by windmills; the waste fens employed for feeding geese, chiefly for their feathers. The **Eastern Pl.**, a rich agricultural district. **Salisbury Pl.**, (20 m. by 14 m.,) elevated, undulating, woodless, and covered with fine green sward; chiefly occupied with sheep-walks. **Dartmoor**, (22 by 20 m.,) wild barren heath, covered with blocks and piles of granite called 'tors.' The **Weald** has remains of large forests, but is now cultivated chiefly for hops.

EXERCISES.—Point out the great watershed of England from Berwick to Land's End. What valleys divide the Cumbrian Mts. from the Pennines? What cos. are divided by the Pennine Range? Name the highest mt. in England; in Wales. Which mt. is the centre of the Welsh system? In what capes do the N. and S. Downs respectively terminate? How would you know from the Map that Salisbury Pl. is elevated? Draw a map shewing the above Mts. and Plains.





ENGLAND.

English Miles
0 10 20 30 40 50

N O R T H

S E A

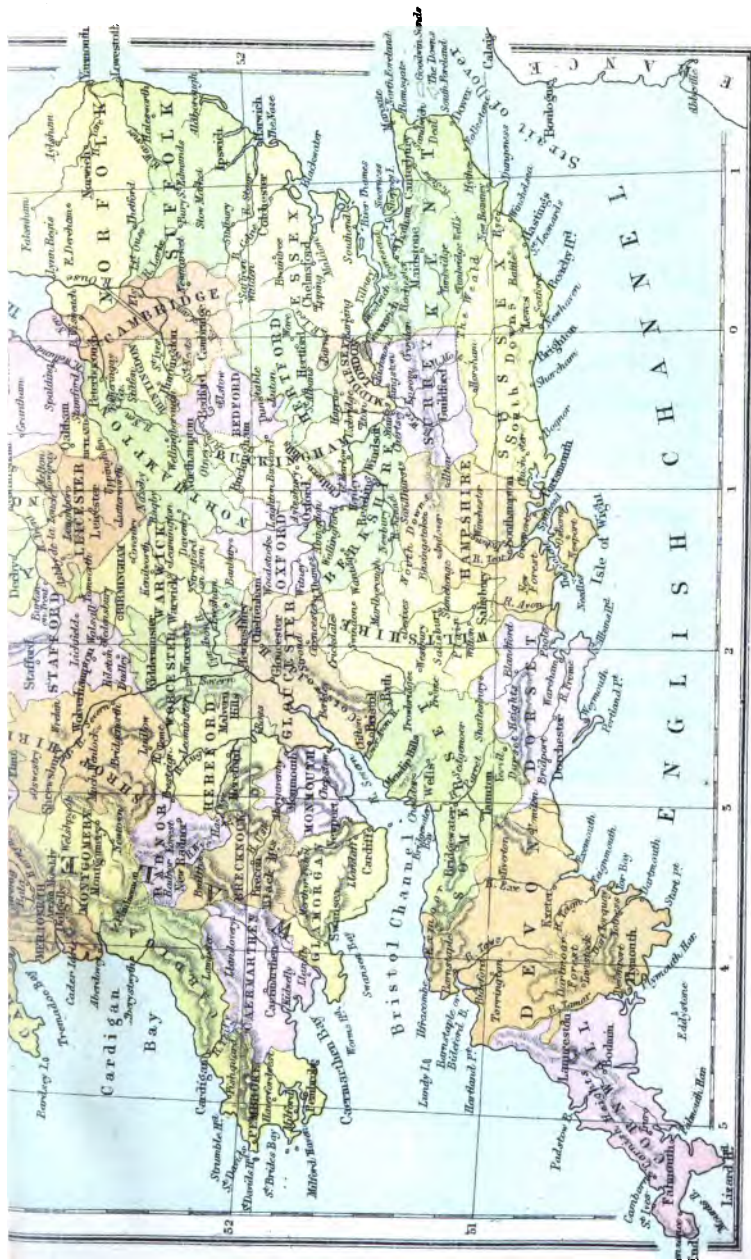
I R I S H S E A

L I N C O L N

C H E S H I R E

W A R W I C K

W A R W I C K





RIVERS.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.
Mersey,	N. of Derbyshire,	W.,	{ Borders of Lanca-	{ Irish Sea.
Dee, . .	Bala L. (Merioneth), . . .	{ E. & N.,	{ N. Wales & Cheshire,	{ " "
Severn, . .	Plynlimmon, . .	{ E. & S.,	{ Montgomery, Shropshire, Worcester, & Gloucester, . .	{ Bristol Chan.
Thames, .	Cotswold Hills,	E.,	{ Bet. the Southern & Midland Cos.,	{ North Sea.
Gt. Ouse,	{ S. of Northampton,	{ N.E.,	{ Bucks, Bedford, Huntingdon, Cambridge & Norfolk,	{ The Wash.
Trent, . .	N.W. of Stafford,	E. & N.,	{ Stafford, Derby,	{ The Humber.
Yorkshire Ouse, . .	N.W. of York, . .	S.E.,	{ Notts, & Lincoln, Yorkshire, . . .	{ " "

MINOR RIVERS.

IRISH SEA.—E'den, Der'want, Lune, Ribble. THE WASH.—Nen, Wel'land, With'am.
 ENG. CHAN.—Ta'mar, Exe, Wiltah A'von. N. SEA.—Tees, Wear, Tyne.

TRIBUTARIES.

SEVERN.—r. b.—The Wye from Plynlimmon, and the Uak from Brecknock.
 l. b.—Upper Avon from Warwick, and Lower Avon from Wilts.

THAMES.—r. b.—Ken'net from Wilts, Wey & Mole from Surrey, Med'way from Kent.

l. b.—Cher'well from Oxford, Thame from Bucks, Colne and Lea from Hertford.

GT. OUSE.—r. b.—Cam from Cambridge, Lark from Suffolk, Little Ouse from Norfolk.

TRENT.—r. b.—Tame from S. Stafford, Soar from Leicester.

l. b.—Dove bet. Stafford and Derby, Derwent from Derby.

OUSE.—r. b.—Nidd, Wharfe, Aire, and Don; l. b.—The Derwent.

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
The Humber, formed by the Trent & York- shire Ouse, . .	170 } 120 }	9,550	Thames, . .	250	6,160
Severn, . .	210 }	8,580	The Wash, formed by Gt. Ouse, &c., }	160	5,850

The Thames is, commercially, the most important river in the world. It issues from Seven Springs in the Cotswolds, under the name of the Churn. The Mersey, and its trib. the Irwell, flowing through the cotton manufacturing districts, have been styled 'the hardest-worked rivers of the globe.' The Tyne, Wear, and Tees, are the great coal-shipping rivers. The Dee, Wye, and Dove are the most picturesque.

LAKES.

Win'dermere, bet. Westmoreland and Lancashire.	Der'wentwater, or Keswick Lake, in Cumberland.
Ulleswater, bet. Westmoreland and Cumberland.	Bala Lake, in Merioneth.

The Eng. Lakes are few and small. The Cumbrian Lakes, more than 14 in number, are remarkably picturesque. Their waters are exceedingly clear, and abound with small fish, called *char*. The largest, Windermere, is only 5 sq. m. in area.

EXERCISES.—How many great slopes in England? Which is largest? Trace the watershed of the Four Gt. Basins. Name the cos. contained in them. Which rivers rise in the Pennine Range? in the Cumbrian Mts.? in the S.W. Mt. System? in the Central Plain? Name the cos. on opposite sides of the Thames. Which two Rs. on the E. and W. Slopes rise nearest each other? What prevents the Severn from running into the Thames? State the proportion of the combined areas of the Four Great Basins to the total area of England and Wales. Point out three rivers named *Derwent*; three named *Avon*; three named *Stour*; three named *Ouse*. With which mts. and rivers are the lakes connected? Draw a map of the Rivers and Lakes of England.

Climate.—From its insular position and the influence of the Gulf Stream, England enjoys a much more mild and equable climate than corresponding latitudes on the continent. The warmest region is the W. and S.W., and the coldest is the E. S.W. winds are most prevalent, and bring both warmth and moisture from the Atlantic: hence the greatest rainfall is in the W. Though variable, the climate of Britain is one of the most salubrious.

PRODUCTIONS.—1. Minerals.—The precious metals are scanty, but the useful minerals, as coal and iron, are very abundant. The chief coal-fields are the seats of the largest and most flourishing manufactures in the world.

The most important coalfields are five in number, viz. —,

- | | | |
|---------------------------------|----------------------------|-------------------------|
| (1.) Northumberland and Durham; | (2.) Yorksh. and Derbysh.; | (4.) Staffordshire; and |
| | (3.) Lancashire; | (5.) South Wales. |

The 1st has been longest worked, and supplies London; the 2nd is the seat of the woollen mnf.; the 3rd of the cotton mnf.; the 4th of the earthenware mnf. in the N., and of hardware mnf. in the S.; and the 5th, the largest, is chiefly worked for the smelting of iron.

Iron.—Over nearly all the coal-fields, especially S. Wales,

Copper.—Cornwall.

Tin.—Cornwall and Devon.

Lead.—Cumberland, Derby, N. Wales, and Devon. (stone is rare.)

Slate.—Cumberland & Wales; building

Salt.—Cheshire and Worcester.

A line drawn from the mouth of the Exe to the E. of Rutland, and thence to the mouth of the Tees, will very nearly divide the mining and manufacturing districts on the W. of it, from the agricultural ones on the E.

2. Vegetation.—The soil is fertile and well cultivated. As in Britain generally, the W. is most suited for pasturage, and the E. for cropping. Wheat is the principal crop, especially in the E. and S.E., barley in the Centre, and oats in the N.

Hops, for brewing, are cultivated chiefly in Kent and Hereford, and apples in the S.W. cos. Devon and Hereford are famous for cyder; Worcester for perry; the cos. adjoining Wales for mead; Middlesex and adjacent cos. for hay; Bedford abounds with market-gardens for the supply of London; Cheshire and Gloucester are famous for cheese.

PEOPLE.—The pop. is the densest in Europe except Belgium. It is sparsest in Radnor and Westmoreland, and densest in Middlesex and Lancashire. The English are of Teutonic origin, being descended from the Saxons along with a few Danes and Normans; the Welsh, and Cornish, a Celtic race, being descended from the British, the ancient inhabitants. The languages spoken are English, Welsh, Manx, (in the Isle of Man,) and French, (in the Channel Islands.)

The established religion is Episcopacy—with two archbishops, 26 bishops, and 12,000 clergy; and an annual revenue estimated at £4,000,000. Dissenters, however, are numerous, especially the Wesleyans, Independents, and Baptists; and all sects are freely tolerated, there being no less than 91 in England. A national system of education has now been established.

The gov. is a limited monarchy, and the legislature consists of the Sovereign and two Houses of Parliament:—viz., the House of Lords and the House of Commons.

The two most important industries are the mns. of woven and metallic goods: and of the former the cotton manf. is the most important. The commerce of the United Kingdom is the most extensive in the world.

The chief imports are raw materials and bread-stuffs, and the exports manufactured goods. Total imports, £212,000,000 per annum; total exports, £274,000,000; Revenue about £70,000,000; National Debt, nearly £800,000,000.

TOWNS.

(The first town given under each co. is the County Town.)

THE SIX NORTHERN COUNTIES.

Northumberland.—Newcastle, Tyne'mouth, N. Shields, Mor'peth, Aln'wick, Ber'wick.

Durham.—Dur'ham, Sun'derland, S. Shields; Har'tlepool, Stockton, Darlington.

York.—York, Hull; Scar'borough, Whit'by, Mid'dlesborough; Leeds, Brad'ford, Wake'field, Hud'dersfield, Hal'ifax; Don'caster, Sheffield.

Cumberland.—Carlisle, Whiteha'ven, Cock'ermouth, Kes'wick.

Westmoreland.—Ap'pleby, Ken'dal.

Lancashire.—Lan'caster; Pres'ton, Black'burn; Liv'erpool, War'rington, St. Helen's; Man'chester, Old'ham, Roch'dale, Bur'y, Bolton, Wig'an.

Newcastle, on the Tyne, with Gateshead, a suburb, the centre of extensive collieries; Tynemouth, N. and S. Shields are its seaports. Aln'wick, pron. *Al'-rick*. Ber'wick, (pron. *Ber'-rick*), famous in Border warfare, long a free town, independent of both England and Scotland. The Stockton and Darlington Railway, the first in the kingdom, opened 1825. York, on the Ouse, at the junction of the Three Ridings; a walled city, with a splendid Gothic Cathedral, called York Minster. Leeds, and most of the other towns in the W. Riding, great seats of the woollen mns. Sheffield, cutlery and plated goods. Kes'wick, centre of the Lake District; mnf. of black lead pencils. Liverpool, on the Mersey, the second great seaport of England, and next to London in pop., (493,000.) Man'chester, the greatest manufacturing town in the world—centre of the cotton

trade; most of the other towns of Lancashire are 'cotton towns,' large and populous. Manchester and Salford united form one city.

THE FIVE EASTERN COUNTIES.

Lincoln.—Lin'coln, Boston, Grant'ham; Stam'ford, Gt. Grim'sby.
Cambridge.—Cāmbridge, Ely; Newmark'et, Wis'beach.
Norfolk.—Nor'wich, Yar'mouth; Lynn Re'gia, or King's Lynn.
Suffolk.—Ip'swich, Bur'y St. Ed'mund's, Lowestoft.
Essex.—Chelm'sford, Col'chester, Har'wich.

Lincoln (pron. *Link-un*) has a noble cath. with a gigantic bell called 'Tom of Lincoln.' Cambridge, famous univ. with 17 colleges—chiefly distinguished for mathematics. Newmarket, partly in Suffolk. Norwich, (pron. *Nor'-rich*), the largest and the finest city in the E. of England, long famous for worsted mnf., (so called from the neighbouring vill of Worstead.) Yarmouth, ch. seat of the Eng. herring-fishery. Ipswich has extensive mns. of agricultural implements. Lowestoft, the most easterly town in England. Harwich, (pron. *Har'-rich*), finest harbour on the E. coast.

THE TEN SOUTHERN COUNTIES.

Kent.—Maid'stone, Tun'bridge Wells, Chat'ham, Gravesend', Wool'wich, Green'wich, Can'terbury, Do'ver.
Surrey.—Guild'ford; King'ston, Rich'mond; Croy'don, Ep'som.
Sussex.—Lew'es, Chich'ester; Brigh'ton, Shore'ham, Has'tings.
Berks.—Read'ing, Win'dsor; Newbury.
Hants.—Win'chester, Southamp'ton; Ports'mouth; New'port.
Wilts.—Sal'isbury, Devi'zes, Trow'bridge, Gt. Brad'ford, Cricklade'.
Dorset.—Dor'chester, Poole, Wey'mouth.
Somerset.—Bath, Wells, Frome; Taun'ton, Bridgewa'ter.
Devon.—Ex'eter, Tiv'erton; Plym'outh, Torquay.
Cornwall.—Bod'min, Launce'ston, Fal'mouth, Tru'ro, Penzance'.

Maidstone, ch. seat of the hop trade. Gravesend, with Margate and Ramsgate, summer resorts of the Loudoners. Greenwich has a Royal Observatory, and a celebrated Naval Hospital. Dover, Folkestone, and Newhaven, (near Brighton,) the usual ports of embarkation for France. Brighton, fine city, gayest of Eng. watering-places. Southampton, ch. packet station for the E. and W. Indies and the Medit. Portsmouth, the greatest of Brit. naval depôts; dockyards, 120 ac. Salisbury, (pron. *Sauls-ber-y*), splendid cath., with spire 404 ft. high—the loftiest in England. Dorchester has numerous Roman and Brit. remains. Bath, one of the handsomest cities in Europe; so named from its hot springs. Bridgewater produces 'Bath-brick,'—a mixture of clay and sand from the R. Parret. Plymouth (pron. *Plim-mouth*) and Devonport form one large town. Torquay, (pron. *Tor-kee*), on Tor Bay, mild climate; great resort of invalids. Truro, centre of copper mines; exports tin and copper. Penzance, the most westerly town in England.

THE FOUR WESTERN COUNTIES.

Monmouth.—Mon'mouth, Chep'stow; New'port, Ab'ergavenny.
Hereford.—Her'eford, Ross, Leomin'ster.
Shropshire.—Shrews'bury, Bridge'north, Lud'low.
Cheshire.—Ches'ter, Birk'enhead, Stock'port, Mac'clesfield.

Chepstow—fine scenery. Newport exports the coal and iron of Monmouthshire. Abergavenny, pron. *Ab'-er-gany*; Hereford, *Her'-s-furd*; Leominster, *Lem'ster*. Shrews'bury—S.E. is the Colebrookdale coal and iron field, with petroleum springs. Chester, an ancient walled city; exports cheese. Birkenhead, opposite Liverpool, a rapidly rising seaport.

THE FIVE NORTH MIDLAND COUNTIES.

Derby.—Derby, Matlock, Chesterfield, Buxton, Glos'op.
Nottingham.—Nottingham, Newark, Mansfield, Work'sop.
Stafford.—Stafford, Stoke; Burton-on-Trent, Lichfield, Wolverhampton, Walsall, Wednesbury, Bilston.
Leicester.—Leicester, Loughborough, Melton-Mowbray, Lutterworth.
Rutland.—Oakham.

Derby,—silks, hosiery, and lace; a gt. railway centre. **Nottingham**, the gt. centre of the lace and bobbin-net mnf. Near **Work'sop** is a district known as the 'Dukery,' from four ducal residences, now reduced to two. **Stoke-upon-Trent**, centre of the 'Potteries,' a district famous for earthenware. **Burton-on-Trent**, noted for ales. **Wolverhampton**, in the 'Black Country,' a great coal and iron field. **Leicester**, pron. *Les'-ter*. **Loughborough**, pron. *Luff'-burro*. **Melton-Mowbray**, fox-hunting.

THE TEN SOUTH MIDLAND COUNTIES.

Worcester.—Worcester, Kidderminster, Dudley; Evesham.
Warwick.—Warwick, Stratford-upon-Avon, Leamington, Rugby, Coventry, Birmingham.
Northampton.—Northampton, Well'ingborough, Peterborough.
Huntingdon.—Huntingdon, St. Neot's, St. Ives; Stilton.
Gloucester.—Gloucester, Tewkesbury, Cheltenham, Stroud, Bristol.
Oxford.—Oxford, Woodstock, Banbury.
Buck.—Aylesbury, Buckingham, Lt. Marlow, Eton.
Bedford.—Bedford, Dunstable, Gt. Uton.
Hertford.—Hertford, St. Albans, Bar'net.
Middlesex.—Brentford, LONDON, Enfield, Uxbridge, Harrow.

Worcester, pron. *Woos'-ter*. **Coventry**, ch. seat of ribbon mnf. and watch-making. **Birmingham**, the great centre of the iron trade of England. **Stilton** gives name to cheese now made in Leicestershire. **Gloucester**, pron. *Glos'-ter*. **Bristol**, third seaport; brass and iron foundries, glass and soapworks, &c. **Oxford**, celebrated univ., with 19 colleges and 5 halls,—most distinguished for Classics. **Eton College**, highest in rank of the Public Schools of England. In **Bedford** jail John Bunyan wrote the 'Pilgrim's Progress.' **LONDON**, cap. of Brit. Empire; largest, wealthiest, and most commercial city in the world; area, 122 sq. m., length, 14 m., breadth, 10 m., circumference, 48 m.; 12,000 streets; pop., 3,252,000, nearly equal to that of Scotland. **Brentford**, co. town of Middlesex. **Enfield**, rifle and sword factory.

NORTH WALES.

Flint.—Flint, Holywell, Mold, St. Asaph.
Denbigh.—Denbigh, Ru'thin, Wrexham, Llangollen.
Caernarvon.—Caernarvon, Bangor, Con'way.
Anglesea.—Beaumaris, Holyhead.
Merioneth.—Dolgelly.
Montgomery.—Montgomery, Welshpool, New'town.

Flint, the port of Chester. **Holywell**, rich copper and lead mines; receives its name from the Well of St. Winifred. **Mole** and **Wrexham**, coal and lead mines. **Llangollen**, (pron. *Langoth'-len*.) its valley the most picturesque in Wales. **Caernarvon**, (pop. 9,000,) the largest town in N. Wales, exports slates and coal. **Beaumaris**, pron. *Bo-mar'-is*. **Dolgelly**, pron. *Dol-ge-th'-ly*.

SOUTH WALES.

Cardigan.—Cardigan, Lampeter, Aberystwith.
Pembroke.—Pembroke, Haverfordwest, Milford, St. David's.
Caermarthen.—Caermarthen, Llanelli.
Glamorgan.—Cardiff, Llandaff, Merthyr-Tydvil; Swansea.
Brecknock.—Brecon.
Radnor.—New Radnor; Presteigne.

Isle of Man.—Castletown, Douglas, Ramsey, Peel.
Channel Isles.—St. Helier, in Jersey; St. Peter's, in Guernsey.

Lampeter. ('Church of St. Peter,') has the college of St. David's for the training of the Welsh clergy. **Cardiff.** ch. shipping port for the minerals of S. Wales. **Merthyr-Tydvil.** (pop. 97,000) the largest town in Wales, in the centre of the S. Wales coalfield. **Swansea** smelts the copper ore of Cornwall, Anglesea, and Australia. **Douglas.** (pop. 12,000,) largest town in the I. of Man; **Castletown,** seat of gov. and the law-courts.

EXERCISES.—Group the towns acc. to the coast or rivers on which they stand; also acc. to the Four Gt. River Basins. Name a town on the Cotswolds,—one on the Chilterns,—one on the watershed bet. the Wash and the Bristol Chan.,—one detached from its co. Which co. towns differ in name from the co.? From London as a centre give the directions and distances of the principal towns.

TOWNS ACCORDING TO POPULATION.

12 Towns with pop. above 100,000.	Thous.	Towns accounting 10 to 100,000.	Thous.	Thous.	
London,	3,252	Portsmouth,	113	Wolverhampton,	68
Liverpool,	493	21 bet. 50,000 and 100,000.		Birkenhead,	66
Manchester, 855 }	480	Sunderland,	98	Halifax,	65
& Salford, 125 }		Merthyr-Tydvil,	97	Southampton,	54
Birmingham,	344	Leicester,	95	Stockport,	53
Leeds,	259	Nottingham,	86	Bath,	52
Sheffield,	240	Preston,	85	Swansea,	52
Bristol,	183	Oldham,	83	Devonport,	50
Bradford,	146	Bolton,	83	Derby,	50
Stoke-upon-Trent,	131	Norwich,	80		
Newcastle,	128	Blackburn,	76	45 bet. 20,000 and 50,000.	
Hull,	122	Huddersfield,	70	41 bet. 10,000 and 20,000.	
		Plymouth,	68	? bet. 5,000 and 10,000.	

About one-half the pop. of the Brit. Isles inhabit cities and towns; but the towns are larger and more numerous, proportionately, in England than in Scotland or Ireland; and they are also more so in the N. than in the S. of England.

PLACES OF HISTORIC NOTE.

	A. D.
Hastings.—Wm. the Conqueror def. Harold, the last of the Saxon Kings,	1066
Otterbourne, 15 m. W. of Morpeth.—Battle of 'Chevy Chase,'	1388
Bosworth, (Leicestershire).—Earl of Richmond def. Richard III.,	1485
Flodden, (near Wooler, Northumberland).—Eng. def. the Scots,	1513
Marston, (N. of Northamptonshire).—Cromwell def. the army of Charles I.,	1645
Worcester.—Cromwell def. Charles II.,	1651
Winchester.—Cap. of England under the Saxon Kings.	
Bunbury, (N.W. of Surrey).—King John signed Magna Charta,	1215
Fotheringay, near Peterborough.—Mary Queen of Scots beheaded,	1587
Lutterworth.—where John Wycliffe, the Reformer, was pastor.	
Olney, (N. of Bucks).—Residence of the poet Cowper.	
Lake District.—Residence of 'Lake Poets,'—Wordsworth, Southey, Coleridge, &c	

BIRTH-PLACES OF EMINENT MEN.

Lichfield.—b.p. of Garrick, the actor, and Dr. Samuel Johnson.
Woolsthorpe. (near Grantham).—b.p. of Sir Isaac Newton, the philosopher.
Burnham-Thorpe. (N. of Norfolk).—b.p. of Lord Nelson, the great naval hero.
Stratford-on-Avon.—b.p. of Shakespeare, the dramatist.
Huntingdon.—b.p. of Oliver Cromwell.
Kilow. (2 m. S. of Bedford).—b.p. of John Bunyan.

ROYAL RESIDENCES AND SEATS OF NOBILITY.

Windsor Ca., Buckingham Pal., (London,) Osborne House, (I. of Wight,) Balmoral Pal., Aberdeenshire, Scotland—royal residences.

Eaton Hall, near Chester, the seat of the Marquis of Westminster.

Knowsley, near Liverpool, " Earl of Derby.

Chatsworth, near Matlock, " Duke of Devonshire.

Chiswick House, Middlesex, " " "

Blenheim Pal., near Woodstock, " Duke of Marlborough.

Woburn Abbey, Bedfordshire, " Duke of Bedford.

Stowe, near Buckingham, " Duke of Buckingham.

Arundel Ca., S. W. of Sussex, " Duke of Norfolk.

Newstead Abbey, in the Dukery, once the seat of Lord Byron, the poet.

Clumber Park, in the Dukery, the seat of the Duke of Newcastle.

Wellbeck Abbey, " Duke of Portland.

Alnwick Ca., Northumberland, " Duke of Northumberland.

Ruins.—Tintern Abbey, (near Chepstow,) a picturesque mass of ruins on the Wye.

Warwick Ca., the most complete specimen of a feudal fortress now existing.

Kenilworth Ca., (4 m. N. of Warwick,) a stupendous pile of ruins.

Bury St. Edmunds—its Abbey once a favourite shrine.

Malmesbury, (Wilts,) a fine Abbey—once covered 45 acres.

Glastonbury (Somerset) was the richest Abbey in England—covered 60 ac.

Natural Curiosities.—The **Loggan** (or Rocking) **Stones** of Cornwall, the largest 90 tons weight, near Land's End. **St. Winifred's Well**, near Holywell, the most copious in the kingdom, discharging 21 tons of water per min., and driving 12 mills in the course of 1 m. The **Caverns of the Peak**, in Derbyshire.

Antiquities.—**Stonehenge**, on Salisbury Plain, and **Abury**, near Marlborough,—Druidical temples. The **Roman Wall**, from Newcastle to Carlisle, bet. the Tyne and the Solway. *Note.*—All towns whose names end in *chester*, from *castra*, Latin, a camp, were Roman stations.



STONEHENGE.

Cathedral Towns.—Canterbury, York, London, Westminster, Winchester, Salisbury, Exeter, Durham, Lincoln, Lichfield, Gloucester, &c.,—29 in number, styled 'cities,' and nearly all the seats of bishoprics.

Universities.—Oxford, Cambridge, London, Durham.

Public Schools.—Eton, Winchester, Harrow, Rugby, Westminster and Charter House, (London,) Shrewsbury, Cheltenham, Marlborough, (Wilts.)

Watering-Places.—Bath, Brighton, Cheltenham, Leamington, Buxton, Matlock, Gt. Malvern, Tunbridge Wells, Harrogate, Scarborough, Aberystwith.

Race-Courses.—Doncaster, Newmarket, Epsom.

CHIEF CENTRES OF INDUSTRY.

Coal-Mining.—Newcastle, Durham, Sunderland, Whitehaven, Workington.

Coal and Iron.—Merthyr-Tydvil, Swansea, Dudley, Shropsh., Black Country, &c.

Salt Springs.—Northwich, Middlewich, Nantwich, (Cheshire;) Droitwich, Epsom.

Earthenware.—Stoke-upon-Trent, Newcastle-under-Lyne, Burslem, Hanley.

China-ware.—Worcester, Derby.

Glass.—Newcastle, London, Bristol, Birmingham, Staffordshire, and Lancashire.

Watchmaking.—London, Liverpool, Prescott, Coventry.

Cotton Mnf.—Manchester, with most of the towns of S. Lancashire, Stockport.
Woollen Mnf.—Leeds, with most of the towns in the W. Riding; Rochdale and Bury; Trowbridge, Gt. Bradford; Stroud, Kidderminster; Norwich.
Flannel Mnf.—Welshpool, Montgomery, Newtown, Wrexham.
Silk Mnf.—Spitalfields, (London,) Manchester, Macclesfield, Coventry.
Lace Mnf.—Nottingham, Derby; Tiverton, Honiton; Bucks.
Hosiery Mnf.—Nottingham, (cotton;) Leicester, (woollen;) Derby, (silk.)
Glove Mnf.—Woodstock, Worcester.
Boots and Shoes.—Northampton and Stafford—both towns and cos.
Strawplait.—Bedford, Dunstable, Luton.

Herring Fishery.—Yarmouth, Lowestoft, and other towns on the N. Sea.
Pilchard " — Penzance, Penryn, St. Ives, and other Cornish towns.
Oyster " — Colchester, Poole.
Sea-ports.—London, Liverpool, Bristol, Hull, Newcastle, Sunderland, &c.
Naval Stations.—Portsmouth, Plymouth, Chatham, Sheerness, Pembroke.
Packet Stations.—London, Southampton, Falmouth, Liverpool, Holyhead, Harwich.
Ship-building.—London, Liverpool, Sunderland, Newcastle, Hull, Bristol, &c.
Cattle-Markets.—Smithfield, (London,) Morpeth, Norwich, Barnet.

RAILWAYS.

<i>Lines.</i>	<i>Towns on the Route.</i>
Gt. Eastern.	London, Hertford, Cambridge, Newmarket, Lynn; Chelmsford, Colchester, Harwich, Ipswich, Norwich, Yarmouth.
Gt. Northern.	London, Huntingdon, Peterborough, Doncaster, York, Newcastle, Berwick.
Midland.	London, Bedford, Leicester, Derby, Sheffield, Leeds, Carlisle.
North-Western.	London, Rugby, Stafford, Warrington, Preston, Lancaster, Carlisle; Chester, Menai-Bridge, Holyhead, (for Ireland.)
Gt. Western & S. Wales.	{ London, Windsor, Reading, Bristol, Exeter, Plymouth, Falmouth, Penzance; Gloucester, Chepstow, Cardiff, Swansea, Milford Haven.
South-Western.	London, Winchester, Southampton, Portsmouth, Exeter.
South-Eastern.	London, Croydon, Reigate, Tunbridge, Folkestone, Dover; Chatham, Canterbury.

II.—SCOTLAND.

Boundaries.—N. and W. the Atlantic; S. the Irish Sea and England; E. the North Sea.

Extent.—Greatest length, 276 m.; breadth, from 80 to 175 m.; area, 31,324 sq m.; coast-line, 2,500 m.

General Aspect.—Scotland is of extremely irregular outline, and at several points highly peninsular in form. The E. coast is penetrated by several wide estuaries, termed "Firths," and but little broken; while the W. coast is scooped out into numerous long winding inlets or sea-lakes, termed "Lochs." Most of the surface is occupied with mountains and valleys, only a small proportion, principally in the E., being level. It abounds with lakes and streams. The slope is chiefly directed eastwards, to the North Sea. The country is commonly divided into the Highlands and the Lowlands,—the former in the N. and W.; the latter in the S. and E.

EXERCISES.—Where are the greatest and least length and breadth of Scotland? What separates Scotland from England? from Ireland? What countries are separated from it by the N. Sea? Which European cap. is in the same lat. as Edinburgh? which in the same lon.? Which cape in America is in the same lat. as the N. of Shetland?

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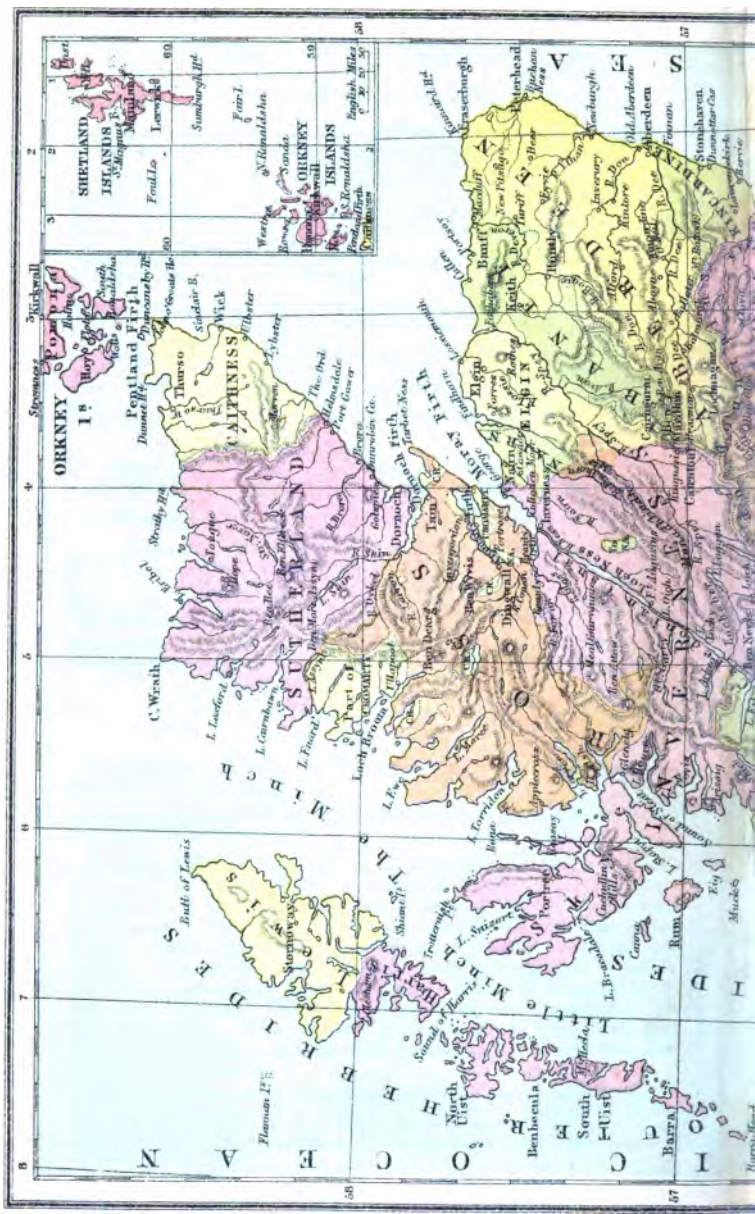
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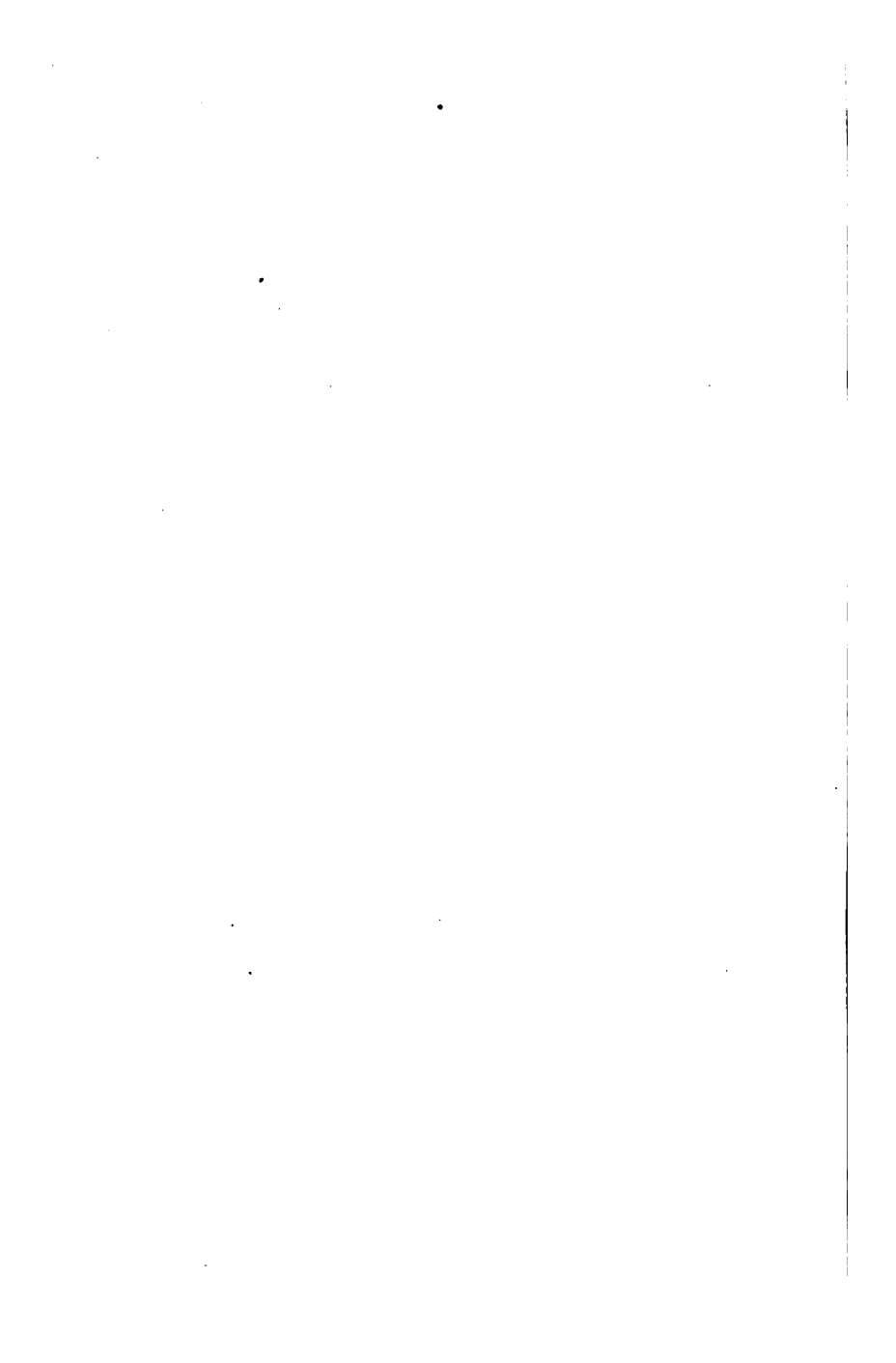
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COUNTIES IN SCOTLAND—33.

NORTHERN COS.—10.	Perth.	Edinburgh or Mid-
Ork'ney & Shet'land.	Fife.	lothian.
Caith'ness.	Kinross'.	Had'dington or E.
Suth'erland.	Clackman'an.	Lo'thian.
Ross.	Stir'ling.	Ber'wick or The Merse.
Crom'arty.	Dumbar'ton.	Rox'burgh or Te'viot-
Inverness'.	Argyle'.	dale.
Nairn.	Bute.	Sel'kirk or Et'trick
Mor'ay or El'gin.		Forest.
Banff.	SOUTHERN COS.—13.	Pee'bles or Tweed'-
Aberdeen'.	Ayr.	dale.
	Ren'frew.	Dumfries'.
	Lan'ark or Clydes'-	Kirkcu'dbright or E.
	dale.	Gal'loway.
	Linlith'gow or W.	Wig'town or W. Gal'-
	Lo'thian.	loway.
MIDDLE COS.—10.		
Kincar'dine.		
For'far.		

Orkney and Shetland, 50 m. apart—bleak, and destitute of trees. Shetland exports small ponies, called 'Shelties,' and Shetland shawls. Sutherland.—The interior consists almost entirely of sheep-walks. Cromarty consists of 14 small detached portions throughout Ross. Inverness, the largest co. in Scotland; mts. and glens chiefly pastoral. Nairn, Moray, and Banff, formed the anc. prov. of Moray, once famous for its fertility. Aberdeen—black cattle and granite quarries. Fife, once the most prosperous part of Scotland, and styled the 'Kingdom of Fife'; its numerous royal burghs on the coast now decayed. Clackmannan, 46 sq. m., about 1/100 part of Inverness, the smallest co. in Scotland. Kinross has the smallest pop. Ayr has three divisions—Carrick, Kyle, and Cunningham, (named from S. to N.); dairy produce and mining. Lanark, the greatest seat of industry in Scotland—mining and mnts.; is divided into the Upper, Middle, and Lower Wards. The three Lothians and Berwick are the most fertile and highly cultivated districts. Peebles, Selkirk, and Roxburgh are hilly and pastoral. Dumfries has three divisions,—Nithdale, Annandale, and Eskdale. Kirkcudbright is called a Stewartry, the Sheriff being styled a Steward. Highland Cos.:—Bute, Argyle, Inverness, Ross, Sutherland, including the Western Isles; also parts of Perth, Forfar, Aberdeen, and Banff. Caithness, Orkney, and Shetland, are not Highland: they were peopled by Norsemen from Scandinavia, and Gaelic is not understood there.

EXERCISES.—How many cos. are maritime, and how many inland? Name the three border cos.—those entirely insular,—those partially insular,—those intersected by the 4th meridian,—those bordering on Perth,—on Lanark,—those due W. of Aberdeen and Berwick. Which have portions detached? Which are peninsular?

INLETS.

IN THE ATLANTIC.

L. Er'ibol, N. of Sutherland.
 Lochs Broom, Tor'rison, and
 Carron, W. of Ross.
 L. Su'nart, and L. Lin'nhe,
 N.W. of Argyle.
 L. Eil, L. Le'ven, and L. Et'ive,
 branches of L. Linnhe.
 Fifth of Clyde, sep. Ayr and
 Renfrew from Bute, Argyle,
 and Dumbarton.

BRANCHES,—Lochs Long and Fyne,

running N., and L. Ry'an, running S. into Wigtown.

IN THE IRISH SEA.

Luce Bay, S. of Wigtown
 Wigtown Bay, bet. Wigtown
 and Kirkcudbright.
 Sol'way F., sep. Dumfries and
 Kirkcudbright from Cumber-
 land.

IN THE NORTH SEA.

F. of Forth, sep. Fife from the
 Lothians.

INLETS—continued.

F. of Tay, sep. Fife from Forfar and Perth.

Moray Firth, sep. Ross from Inverness, Nairn, and Moray.

The Firth of Clyde surpasses all the other estuaries in commercial importance. Its shores are studded with beautiful watering-places. L. Fyne, noted for herrings. L. Ryan has anchorage for the largest fleet. Solway F., shallow, with shifting sands, and high and rapid tides.

BRANCHES,—**Beauly F.** and **Cromarty F.**

Dornoch F., bet. Ross & Sutherland.

ISLANDS.

NORTH COAST.

Orkney Is., N.E. of Caithness: Principal, **Fowna** or **Mainland** and **Hoy**.

Shetland Is., N.E. of Orkney: Principal, **Mainland**, **Yell**, and **Unst**.

WEST COAST.

Western Islands, or **Hebrides**, W. of the Mainland of Scotland, viz.:—

1. OUTER HEBRIDES.—

The **Orkney Is.** consist of 73 islands—29 inhabited—divided into N. Isles and S. Isles. The **Shetland Is.**, twice the size of Orkney, about 90 islands—25 inhabited. A violent current flows bet. the two groups, known as the **Sumburgh Roost**. The **Hebrides**, 160 in number, 70 inhabited. The entire chain of the outer Hebrides (120 m. in length) is known as the 'Long Island.' **Lewis** and **Harris**, connected by an isthmus, belong to different cos. **St. Kilda**, 52 m., W. of Harris, the remotest inhabited spot in the United Kingdom—the few inhabitants are fowls; **Roekall**, 180 m. W. from it, is tenanted only by sea-fowls. **Staffa**, basaltic columns and caverns—principal, **Fingal's Cave**. **Iona**, or **Icolmkill**, ('Church of St. Columba.') **Bass Rock** has the remains of a ca. once used as a state prison. **Ailisa Craig**, a conical rock, 1098 ft. high, the resort of solan geese and other sea-fowl.

Lew'ia, **Har'ris**, **N. Uist**, **Benbec'ula**, **S. Uist**, and **Bar'ra**.

2. **INNER HEBRIDES**.—**Skye**, **Mull**, **Staffa**, **Io'na**, **Ju'ra**, and **Islay**.

Bute, **Ar'ran**, **The Cum'braes**, and **Ail'sa Craig**, in the F. of Clyde.

EAST COAST.

May, **Bass Rock**, **Inchkei'th**, and **Inchcolm'**, in the F. of Forth.

CAPES.

NORTH COAST.

Sum'burgh Hd., S. of Shetland.
Dun'canby Hd., N.E. of Caithness.

Dun'net Hd., N. of Caithness.
C. Wrath, N.W. of Sutherland.
Butt of Lew'is, N. of Lewis.

WEST COAST.

Bar'ra Hd., S. point of the Outer Hebrides.

Ardnamur'chan Pt., N.W. of Argyre.

Mull of Cantire', S. of Argyre.

SOUTH COAST.

Mull of Gal'loway and **Bur'row Hd.**, S. of Wigtownshire.

EAST COAST.

St. Abb's Hd., N.E. of Berwick.
Fife Ness, E. of Fife.

Buch'an Ness, E. of Aberdeen.
Kinnaird's Hd., N.E. of Aberdeen.

Tar'bet Ness, N.E. of Ross.

Su'tors of Cromarty, at the mouth of Cromarty F.

Duncanby Hd.; near this 'John o' Groat's House,' but no house now exists. **C. Wrath**, a lofty pyramidal rock in front of a huge range of broken cliffs. **Mull of Galloway**, at the extremity of a pen. called the Rhinns of Galloway, and in the parish of Kirkmaiden, ('Maidenkirk.')

STRAITS.

NORTH COAST.

Pentland Firth, bet. Caithness and Orkney.

WEST COAST.

The Minch, bet. Lewis and the Mainland.

Little Minch, bet. Skye and the Outer Hebrides.

Sd. of Sleat, bet. Skye and the Mainland.

Sd. of Mull, bet. Mull and the Mainland.

Sd. of Jura, bet. Jura and the Mainland.

Sd. of Islay, bet. Islay and Jura.

Kilbrannan Sd., bet. Cantire and Arran.

Kyles of Bute, bet. Bute and Argyle.

The Pentland Firth is properly a strait, and not a Firth or Estuary. It is $5\frac{1}{2}$ m. broad, and remarkable for strong and rapid tides and currents.

EXERCISES.—Name all the other inlets on the W. coast. Name all the smaller islands named on the map? Which Is. belong to Ross? to Inverness? to Argyle? Point out the Bell Rock, Skerryvore, and Pladda Lighthouses, and the peninsula of Cantire. Which is the most northerly pt. of Scotland? Name the extreme pts. of the mainland, N., S., E., and W. Which pts. are nearest Ireland, and how far are they distant? Which two are nearly on the same meridian? Draw a map shewing the foregoing Outlines.

MOUNTAINS.

I.—THE NORTHERN SYSTEM, or N. HIGHLANDS, to the W. and N. of Glenmore, (bet. L. Linnhe and Moray Firth.)

Chief Summits:—Ben Affow (4,000 ft.) and Ben Wyvis in Ross; Ben More Assynt and Ben Clibriche in Sutherland; Cuchullin Hills in Skye; and Ben More in Mull.

II.—THE CENTRAL SYSTEM, bet. Glenmore and the Firths of Forth and Clyde.

1. The Grampians, from L. Linnhe, N.E. to the North Sea.

Chief smts.:—Ben Nevis (4,406 ft.) S.W. of Inverness; Ben Cruachan, in the N. of Argyle; Ben Lo'mond, N.W. of Stirlingshire; Ben Led'i, Ben More, Ben Lawers, Schiehallion, in Perthshire. Ben Macdui (4,296 ft.), Cairntoul', Cairn-gorm', and Lochnagar', in or near the S.W. of Aberdeenshire.

2. The Sidlaw Hills, S. of Forfar; Och'il Hills, S.E. of Perthsh.; and Campsie Fells, in Stirlingsh.—forming one Range.

III.—THE SOUTHERN SYSTEM, or SOUTHERN HIGHLANDS, over the Southern Counties.

1. Lowther and Lead Hills, N. of Dumfries, and the Cheviot Hills on the English Borders.

Chief smts.:—Broad Law, 2741 ft., in Peebles; Tin'to, in Lanark; Hart Fell, in Dumfries.

2. Lammermuir' Hills, bet. Haddington and Berwick, and Pentland Hills, S.W. of Edinburgh.

The Northern Highlands are, in general, detached groups scattered over bleak lofty uplands. The Central Grampians, 100 m. by 12 to 25 m., form the

boundary of Highlands and Lowlands. **Ben Nevis**, the highest mt. in Britain is 24 in. in circumference at the base. Its height is within 150 ft. of the snow-line. **Schiehallien** is the mt. against which Maskelyne the astronomer weighed the earth. The **Cheviot** and **Lowther** range is continued westwards by lower heights to **L. Ryan**.

EXERCISES.—Which range connects the Firths of Tay and Clyde? Trace the ridge connecting the Lowther and Cheviot Range with the Pentland and Lammermuir Range; and what basin is thus enclosed? With what English range is the Lowther and Cheviot range connected? Name the outlying heights of the Grampians in Jura and Arran. What is the E. extremity of the Lammermuirs? Name other heights laid down on the map. Draw a map of the Mt. System of Scotland.

PLAINS.

Glenmore, ('Great Glen,') bet. Moray Firth and Loch Linnhe. **Strathmore**, ('Great Valley,') bet. the Grampians and the Ochils. **Carse of Gowrie**, on the N. bank of the Firth of Tay. **Carse of Stirling and Falkirk**, along the S. bank of the Forth. **Central Plain**, from Firths of Tay and Forth, S. W. to Firth of Clyde. **Moor of Rannoch**, N. W. of Perthshire, 20 miles square.

Glenmore, 60 m. in length, chiefly occupied by three lakes,—**Ness**, **Oich**, and **Lochy**, which are united by the Caledonian Canal. **Moor of Rannoch**, an elevated plateau, one of the most desolate wastes in the kingdom.

Strath in the N., and **Dale** in the S. of Scotland, are the names applied to river-valleys. **Carse** is the term applied to low alluvial lands adjoining rivers.

RIVERS.

RIVER.	RISES IN.	FLOWS.	THROUGH.	FALLS INTO.
Clyde, . .	{ Lowther Hills, (S of Lanark.)	{ N. W., {	Lanark, Renfrew, & Dumbarton, . .	{ F. of Clyde.
Tweed, . .	{ Lowther Hills, (S. of Peebles.)	{ N. & E., {	Peebles, Selkirk, Rox- burgh & Berwick, (S. of Perth, Clackm., Fife, Stirling, The Lothians, . .	{ North Sea.
Forth, . .	Ben Lomond, .	E.,	{ Perthsh. and part of Forfar, . .	{ F. of Forth.
Tay, . . .	Loch Tay, . .	N. E. & S. E.	{ S. of Aberdeensh., Inverness, Moray, and Banff, . .	{ F. of Tay.
Dee & Don,	S. W. of Aberdeen,	E.,		{ North Sea.
Spey, . . .	S. E. of Inverness,	N. E.,		{ North Sea.

MINOR RIVERS.

FIRTH OF CLYDE.— Irvine , Ayr , Doon .	NORTH SEA.— North and South Esk ,
SOLWAY FIRTH.— Ken , Dee , Nith , Annan , Esk .	Dev'ron , Findhorn , Nairn , and Ness .

TRIBUTARIES.

CLYDE.—r. b.—**Douglas**, **A'von**, **Carr**; l. b.—**Kelvin**, **Leven**.
TWEED.—r. b.—**Ettrick** & **Yarrow**, (united,) **Teviot** & **Till** (fr. Northumberland).
 l. b.—**Gala**, from Midlothian, **Lea'der** and **Ad'der** from Berwick.
FORTH.—r. b.—**Carron**, **A'von**, **Al'mond**, **Esk**.
 l. b.—**Teith**, **Al'tan**, **Dev'on**, **Le'ven**, (from L. Leven).
TAY.—r. b.—**Al'mond**, **Barn**; l. b.—**Ly'on**, **Tum'mel** and **Garry**, **Is'la**.

LARGEST RIVERS.

RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)	RIVER.	LENGTH. (Miles.)	AREA OF BASIN. (Sq. m.)
The Tay, . .	120	2,750	The Spey, . .	110	1,190
The Tweed, .	96	1,870	The Dee, . .	90	705
The Clyde, .	98	1,580	The Don, . .	62	530
The Forth, .	70	1,480			

The **Tay** is the longest and largest river in Scotland; the **Clyde** the most commercial; the **Tweed** the most famous in history and poetry; and the **Spey** the most rapid in Britain. The **Tweed**, **Tay**, **Dee**, and **Spey**, abound most with salmon, and the rivers of Perthshire with pearl-oysters. Most of the rivers are not navigable; but the **Clyde** is navigable to Glasgow, the **Forth** to Stirling, and the **Tay** to Perth. The **Forth**, including its many windings, or "links," has a length of 170 m.

LAKES.

- | | |
|--|---|
| <p>L. Shin and L. Assynt', in Sutherland.</p> <p>L. Maree', in the W. of Ross.</p> <p>Lochs Ness, Oich, Loch'y, & Lag'-gan, in Inverness-shire.</p> <p>L. Awe, in Argyle.</p> <p>L. Er'icht, bet. Perth and Inverness.</p> | <p>Lochs Ran'nooh, Tay, Earn, and Kat'rine, in Perthshire.</p> <p>L. Lomond, bet. Stirling and Dumbarton.</p> <p>L. Le'ven, in Kinross-shire.</p> <p>St. Ma'ry's Loch, in Selkirkshire.</p> <p>L. Doon, in Ayrshire.</p> <p>L. Ken, in Kirkcudbright.</p> |
|--|---|

The Lakes of Scotland are numerous, and celebrated for their grand and picturesque scenery. **L. Lomond**, the largest, is also the finest of British lakes,—24 m. by 7 of greatest breadth, area, 45 sq. m.,—with 30 islets. **L. Katrine**, the scene of Sir Walter Scott's "Lady of the Lake;" supplies Glasgow with water.

EXERCISES.—How many slopes in Scotland? Which is the longest, and why? Trace the great watershed of S. Scotland? What mts. bound the basin of the Tweed? of the Forth? of the Tay? Which rivers form boundaries of cos.? Which fall into estuaries? Which rivers drain E. Lothian? the N. of Fife? the N. of Aberdeen? the cos. N. of the Moray Firth? Which three rivers rise near each other, and flow in three different directions? Arrange the Minor Rivers in tabular form, like the Table of Clyde, &c., given above. Name the cos. in the basin of the Firths of Moray, Tay, Clyde, Forth, Solway, and of the River Tweed. Name the rivers that drain each of the lakes. Point out three rivers *Avon*, two rivers *Leven*, two lochs *Leven*, two rivers *Dee*, four rivers *Esk*. Draw a map of the Rivers and Lakes of Scotland.

Climate.—From its more northerly position, and greater general elevation, Scotland has a somewhat colder climate than England, and the crops are several weeks later. The W. and S. are mild and humid, the central parts cold and humid, the E. dry, but exposed to chill easterly winds. Prevailing winds, W. and N.W.; in spring, N. and N.E. Wheat will not ripen farther N. than Inverness.

PRODUCTIONS.—1. Minerals.—

- | | |
|---|---|
| <p>Coal, Iron, & Limestone, chiefly in the Central Plain.</p> <p>Building-stone, over the whole country.</p> <p>Lead, in the Lead Hills.</p> | <p>Roofing-slates, in Argyle.</p> <p>Paving Flag-stones, in Caithness, and at Arbroath in Forfarsh.</p> <p>Granite, in Aberdeen and Kirkcudbright.</p> |
|---|---|

A line drawn S.W. from the F. of Tay to the angle of the F. of Clyde, and another from St. Abb's Head to Ailsa Craig, will include nearly all the coal measures of Scotland, and the chief seats of industry.

2. Vegetation.—The soil of Scotland is comparatively poor, and only about $\frac{1}{5}$ of it is under cultivation, but the agriculture is of the highest order. The centre, W., and N.W., are chiefly grazing and pastoral districts, where great numbers of sheep and cattle are reared for the markets of England. The valleys of the E. and S. are chiefly agricultural, and all the usual crops are raised. The most fertile portions are the Carse of Gowrie, Stirling, and Falkirk, the Lothians, and the Merse.

3. Animals.—Ayrshire and Angus are famous for their breeds of dairy cattle; Clydesdale, for draught-horses; Shetland, for ponies called 'shelties;' and the Highlands, for black cattle. The red-deer and the roebuck, with the ptarmigan, or white grouse, are game peculiar to the Scottish Highlands. Salmon abound in the rivers, and the herring, cod, and haddock in the neighbouring seas.

PEOPLE.—The Lowland Scotch are of Teutonic origin, and speak a cognate dialect with the English,—which, however, is fast superseding it. The inhabitants of the Highlands and Hebrides are Celts, and speak the Gaelic language. Presbyterianism is the prevailing form of religion. Education is very generally diffused, Scotland having enjoyed a national system of education since 1696, when a school was required to be established in every parish.

Industries.—Mnfs. of cotton, linen, woollen, glass, and stone-ware; coal and iron working, ship-building, whisky-distilling; salmon, herring, and whale fishing.

Imports.—Cotton, flax, hemp, timber, tea, sugar, wines, &c.

Exports.—Cotton, linen, and woollen goods, coal, iron, fish, granite, slate, &c.

The cotton mnf. prevails most extensively in the cos. of Lanark and Renfrew; linen, in Forfar and Fife; woollen, in the basin of the Tweed; coal and iron working in Lanark, which has 150 collieries; ship-building, on the Clyde; herring-fishing, on the N.E. coast, around the Moray Firth.

TOWNS.

THE TEN NORTHERN COUNTIES.

Orkney and } —Kirk'wall and Strom'ness.

Shetland. } —Ler'wick.

Caithness. —Wick, Thur'so.

Sutherland. —Dor'noch, Gol'spie, Helm'sdale.

Ross. —Ding'wall, Invergor'don, Tain, Stor'noway, (in Lewis.)

Cromarty. —Crom'arty, Ullapool.

Inverness. —Inverness, Fort-William, Portree', (in Skye.)

Nairn. —Nairn.

Moray. —El'gin, For'res, Foch'abers.

Banff. —Banff, Portsoy', Cul'len, Keith.

Aberdeen. —Aberdeen', Peterhead', Fra'serburgh, Hunt'ly.

Kirk'wall, antique town, with fine cath., founded 1138. Ler'wick: vessels call here on their way to the Greenland whale-fishing. Wick, ch. seat of the northern herring-fishery. Dor'noch, the smallest co.-town in Scotland. (647.)

Greenlaw, in Berwick, is next, (800.) **Inverness**, cap. of the Highlands, in a fine situation. **Fort George**, **Ft. Augustus**, **Ft. William**, on the line of the Caledonian Canal, built to overawe the Highlanders. **Glenlivet**, in the S. of Banff, famous for whisky. **Aberdeen**, built of grey granite; has much trade and commerce. **Peterhead**, most easterly town in Scotland; produces red granite; ch. station of the northern whale fishery.

TEN MIDDLE COUNTIES.

Kincardine.—Stoneha'ven, Ber'vie, Laurencekirk'.

Forfar.—For'far, Dundee', Arbroath', Montrose', Bre'chin, Kirriemuir', Cou'par-An'gus.

Perth.—Perth, Dunkeld', Blairgow'rie, Crieff, Dunblane'.

Fife.—Cu'par, St. An'drews, Dy'sart, Kirkcal'dy, Burntis'land, Dunferm'line.

Kinross.—Kinross'.

Clackmannan.—Al'loa, Clackman'nan, Tillicoult'ry, Dol'lar.

Stirling.—Stir'ling, Grange'mouth, Fal'kirk, Ban'nockburn', Kilsyth'.

Dumbarton.—Dumbar'ton, Hel'ensburgh, Kirkintil'loch.

Argyle.—Invera'ry, Cam'pbeltown, Dunoon', O'ban.

Bute.—Roth'esay, (Bute); Brod'ick, (Arran); Mill'port, (Cumbrae.)

Dundee, ch. seat of the linen mnf. **Perth**, once the cap.; from its fine situation styled the "Fair City." **Comrie**, W. of Crieff, has frequent shocks of earthquake. **Bridge of Allan**, (3 m. N. of Stirling,) the most fashionable watering-place in Scotland. **St. Andrews** has the oldest univ. in Scotland, founded 1411. **Dunfermline**: fine linens; of great historic interest. **Alloa**: ale, and woollen yarns. **Dollar** has a large endowed academy. **Stirling**: famous cas. on a rock 800 ft. high, commanding a view of twelve battle-fields. **Falkirk**: cattle-markets called 'trysts': near it **Garron** and other large ironworks. **Dumbarton**: famous cas. on a rock 560 ft. high; was the cap. of an ancient British kingdom. **Campbeltown**, famous for whisky. **Oban**, ch. town in the W. Highlands. **Roth'esay**: mild climate.

THIRTEEN SOUTHERN COUNTIES.

Ayr.—Ayr, Ir'vine, Ardros'san, Maybole', Gir'van; Kilmar'nock, Cum'nock.

Renfrew.—Ren'frew, Port-Glas'gow, Green'ock; Pais'ley, Pollok-shaws', John'stone, Barrhead'.

Lanark.—Lan'ark, Ham'ilton, Ruth'erglen, Glas'gow; Air'drie, Coatbridge', Wish'aw.

Linlithgow.—Linlith'gow, Bo'ness', Queens'ferry, Bath'gate.

Edinburgh.—ED'INBURGH, Leith, Portobel'lo, Mus'selburgh, Dalkeith'.

Haddington.—Had'dington, Dunbar', N. Ber'wick, Prestonpans'.

Berwick.—Green'law, Dunse, Cold'steam, Lau'der.

Roxburgh.—Jed'burgh, Haw'ick, Mel'rose, Kel'so.

Selkirk.—Sel'kirk, Galashiels'.

Peebles.—Pee'bles, Innerlei'then.

Dumfries.—Dumfries', San'quhar, An'nan, Moff'at, Lang'holm.

Kirkcudbright.—Kirkcu'dbright, Cas'tle Doug'las, Dalbeat'tie.

Wigtown.—Wig'town, New'ton-Stew'art, Stranrá'er, Portpat'rick.

Ayr, centre of the "Land of Burns." **Kilmarnock**: carpets. **Paisley**: fine shawls and muslins. **Glasgow**, the largest city in Scotland, and the third largest in the United Kingdom; ch. seat of the commerce and mnf. of Scotland. **Bath-**

gate: paraffin oil works. **EDINBURGH**, one of the finest cities in Europe, on a romantic site; anc. cas. on a rock 434 ft. high; Holyrood Palace. **Leith**, second seaport. **Prestonpans:** ale, and oysters termed "pan-dores." **Dumfries**, largest town in the S. of Scotland; burial-p. of the poet Burns. **Melrose Abbey**, finest ruin in Scotland; **Dryburgh Abbey**, 4 m. E., burial-p. of Sir W. Scott. **Kirkcudbright**, (*Kir-coo'-bry*). **Gretna-Green**, in Dumfries, near the Eng. border, once famous for clandestine marriages. **Yetholm**, E. of Roxburgh, long the head-quarters of the Scotch gipsies. **Sanquhar**, (*Sank'-har*.)

EXERCISES.—Classify the above towns according to position on coast or river-basin. Draw out a table of river-basins with towns in them. Give the distances from Edin. of Perth, Dundee, Aberdeen, Inverness, Glasgow, Ayr, Dumfries, and Berwick. What towns are on or near the same meridian as Kinnaird's Hd., Duncansby Hd., Cape Wrath, and near the 4th meridian? on or near the parallel of St. Abb's Hd.? Lay down on map all towns above 10,000 of pop. and all the co.-towns. What cos. have caps. named differently from the cos.?

TOWNS ACCORDING TO POPULATION.

	Thous.	Bet. 10,000 and 20,000.		Thous.	Thous.
Glasgow,	477		Thous.	Airdrie,	13
Edinburgh,	197	Arbroath,	20	Kirkcaldy,	12
Dundee,	119	Ayr,	18	Hamilton,	11
Aberdeen,	88	Dumfries,	15	Coatbridge,	?
Greenock,	87	Montrose,	15	Forfar,	11
Paisley,	48	Dunfermline,	15	Dumbarton,	11
Leith,	44	Stirling,	14	Port-Glasgow,	11
Perth,	26	Inverness,	14	Hawick,	11
Kilmarnock,	23				

PLACES OF HISTORIC NOTE,

A. D.

Dunnotar Cas., near Stonehaven,—the Scottish Regalia were concealed, 1650 and Covenants were imprisoned under Charles II.
St. Andrews,—Patrick Hamilton, Wishart, and other martyrs burned.
Magna Moor, near St. Andrews,—Archbishop Sharp assassinated, 1679
Loch Leven Cas.,—prison of Mary Queen of Scots, 1567-8
Dunfermline,—burial-place of Bruce and other Scottish kings.
Perth,—James I. assassinated, 1437
Glencoe, N. of Argyle,—the Macdonalds massacred, Feb., 1691
Boone, near Perth,—where the kings of Scotland used to be crowned.
Iona,—residence of St. Columba; burial-p. of ancient Scottish kings, &c.

BATTLE-FIELDS.

Largs,—Haco, the last Danish invader, def. by Alex. III., 1263
Stirling Bridge,—Wallace defeated the English, 1297
Falkirk,—Ed. I. def. Wallace, 1298, and Pr. Chas. Stuart def. Royal troops, 1746
Bannockburn,—the Scots under Bruce def. the English, 1314
Dunbar,—English under Cromwell def. the Scots under Leslie, 1650
Bothwell Bridge, (N. of Hamilton),—Chas. II.'s troops def. Covenanters, 1679
Pass of Killiecrankie, (15 m. N.W. of Dunkeld),—Claverhouse def. Royal army, 1689
Bheriffmuir, (near Dunblane),—King's forces def. the Jacobites, 1715
Prestonpans,—Prince Chas. Stuart def. Royal troops under Sir John Cope, 1745
Culloden Moor, (E. of Inverness),—Duke of Cumberland def. Fr. Ch. Stuart, 1746

BIRTH-PLACES OF EMINENT MEN.

A. D.

Cromarty,—Hugh Miller, the geologist, 1802-1856
Anstruther, (Fife),—Dr. Thomas Chalmers, pulpit orator and writer, 1780-1847
Kirkcaldy,—Dr. Adam Smith, political economist, 1732-1795
Haddington,—John Knox, the reformer, 1505-1572
Ellerslie, (near Renfrew), Sir William Wallace, the Scottish hero, 1276-1305
Paisley,—Robert Tannahill, poet, 1774-1810
Greenock,—Jas. Watt, the great improver of the steam-engine, 1736-1819
Ayr, (2 m. S., on the Doon), Robert Burns, the poet, 1759-1796
Linlithgow Pal.,—Mary Queen of Scots, 1542-1587
Edinburgh,—Sir Walter Scott, poet and novelist, 1771-1832
 Lord Brougham, orator and statesman, 1784-1868

ROMANTIC SCENERY.

Trossachs, E. of L. Katrine,—a wooded glen of far-famed beauty.
Glencoe, N. of Argyle,—10 m. long, remarkable for gloomy sublimity.
Falls of Clyde, near Lanark, four in number; grandest, Corra Linn, 84 ft. high.
Grey Mare's Tail, a cataract, 200 ft. high; also Devil's Beef Tub, near Moffat.
Falls of Devon, 3 m. E. of Dollar,—Rumbling Bridge, Canldron Linn, &c.
Cataract of Bran & Ossian's Hall, near Dunkeld.
Bullers of Buchan, near Buchan Ness, a chasm 50 ft. wide and 150 deep, in which the sea boils or rages.
Glen Cornuisk, in Skye,—the most savage spot in Brit.
Fingal's Cave, in Staffa, 240 ft. long, 60 broad, and 60 high.
Falls of Foyers, on E. bank of L. Ness,—Upper Fall, 80 ft.; Lower, 90 ft.



FINGAL'S CAVE.

COUNTRY SEATS OF NOBILITY.

Balmoral Pal., on the Upper Dee, Highland residence of Queen Victoria.
Dunrobin Cas., near Golspie, the seat of the Duke of Sutherland.
Cas. Gordon, near Fochabers, " Duke of Richmond.
Soane Pal., near Perth, " Earl of Mansfield.
Dalkeith Pal., near Dalkeith, " Duke of Buccleuch.
Hamilton Pal., near Hamilton, " Duke of Hamilton.
Inverary Cas., near Inverary, " Duke of Argyle.
Abbotsford, 3 m. W. of Melrose, was the seat of Sir Walter Scott.
Taymouth Cas., N.E. end of Loch Tay, the seat of the Marquis of Breadalbane.
Blair Cas., near Blair-Athol, Perthsh., the seat of the Duke of Athol.

CHIEF CENTRES OF INDUSTRY.

Coal and Iron Mining.—Glasgow, Airdrie, Coatbridge, Wishaw; Falkirk, Bathgate, Bo'ness.
Granite Works.—Aberdeen, Peterhead, Dalbeattie, Creetown.
Slate Quarries.—Ballachulish (L. Leven) and Easdale, in Argyle.
Cotton Mfns.—Glasgow, Paisley, Johnstone, Pollokshaws, Barrhead; Aberdeen.
Linen Mnf.—Dundee, Arbroath, Montrose, Brechin, Forfar, Kirriemuir, Coupar-Angus; Dunfermline, Kirkcaldy, Cupar-Fife; Aberdeen.
Woollen Mnf.—Hawick, Galashiels, Peebles, Innerleithen, Selkirk, Langholm; Kilmarnock; Bannockburn, Tillicoultry; Aberdeen.
Ch. Seaports.—Glasgow, Greenock, Leith, Aberdeen, Port-Glasgow, Dundee.
Shipbuilding.—Glasgow, Greenock, Dumbarton, Dundee, Aberdeen.
Herring Fishing.—Dunbar, Peterhead, Fraserburgh, Wick, Stornoway, Inverary, Campbeltown.
Whale Fishing.—Peterhead, Dundee, Lerwick.
Markets.—Inverness, (sheep and wool,) Muir of Ord, and Falkirk, (cattle and sheep,) Dumfries, (cattle, horses, pork,) St. Boswell's, and Lockerby, (lambs;) Dalkeith, Haddington, and Kelso, (grain.)

Antiquities.—"Standing Stones of Stennis," (Druidical,) near Stromness.
Graham's Dyke, or Wall of Antoninus, (Roman.) bet. Firths of Forth & Clyde.
Canals.—Forth and Clyde, Union, Caledonian, Crinan.
Anc. Royal Residences.—Holyrood Pal., (Edinburgh,) Linlithgow Pal., Stirling Cas., Dunfermline Pal., Falkland Pal., Perth.
Cathedrals.—Glasgow, and Kirkwall, the most entire in Scotland; Elgin, Melrose, Kelso, and Jedburgh, in ruins.

Universities.—Edinburgh, Glasgow, Aberdeen, St. Andrews.
Watering-Places.—Strathpeffer, (near Dingwall,) Bridge of Earn, (near Perth,) Bridge of Allan, (near Stirling,) Innerleithen, (St. Ronan's Well,) and Moffat.
Bathing-Places.—Helensburgh, Dunoon, Rothesay, Ardrossan; Portobello.

RAILWAYS.

Lines.

Chief Towns on the Route.

North British,	{	East Coast Route.—Edinburgh, Haddington, Dunbar, Berwick.
		Waverley Route.—Edin., Dalkeith, Galashiels, Hawick, Carlisle.
		Western Section.—Edin., Linlithgow, Falkirk, Glasgow; Dunbarton, Helensburgh.
Caledonian,	{	Northern Section.—Edin. and Glasgow, Stirling, Dunfermline; Burntisland, Kirkcaldy, Cupar, St. Andrews, Dundee, Perth.
		S. Section.—Edin. & Glasgow, Moffat, Lockerby, Carlisle.
		Northern Section.—Edin. and Glasgow, Stirling, Perth, Dundee; Arbroath, Montrose; Aberdeen.
Glasgow and S.-Western,	{	—Glasgow, Paisley, Ayr, Girvan; Kilmarnock, Dumfries, Annan, Carlisle.
		Highland, &c.—Perth, Dunkeld, Forres, Inverness; Dingwall, Golspie, Skye.

III. IRELAND.

Boundaries.—N., W., and S., the Atlantic; E., the Irish Sea, with St. George's Chan. and N. Chan.

Extent.—Length, N.E. and S.W., 300 m.; greatest breadth, 170 m.; area, 82,512 sq. m.; coast-line, 2200 m.

General Aspect.—Ireland is of a diamond or rhomboidal form. Its E. coast has a continuous wavy outline, but the N. and W. sides are bold, deeply indented, and abound with islands. The centre is a great plain, traversed by a few low hills and skirted by isolated groups of mts. ranged round the coast, and rarely extending more than 20 m. inland. The hills are generally rounded, and the general aspect is less rugged than the N. and W. parts of Britain, and less tame than the E.

EXERCISES.—What are the nearest points of Scotland and England? and what are the respective distances? Give a town in Scotland and one in England nearly on the same par. as the N. coast of Ireland. Give two large towns in England nearly on the same par. as the S. extremity. Name important places on the same par. as Dublin. Compare the coast-line with the area.

PROVINCES.

	Cos.		Cos.
Ul'ster, in the N.E.,	9	Mun'ster, in the S.W.,	6
Lein'ster, in the S.E.,	12	Con'naught, in the W.,	5

COUNTIES—32.

I. ULSTER.		Wick'low.	Car'low.
Down.	Cav'an.	Wex'ford.	Kilken'ny.
An'trim.	Mon'aghan.	III. MUNSTER.	
Lon'donderry.	Armagh'.	Tippera'ry.	Ker'ry.
Donegal'.	Tyrone'.	Wa'terford.	Lim'erick.
Fer'managh.		Cork.	Clare.
II. LEINSTER.		IV. CONNAUGHT.	
Louth.	King's County.	Gal'way.	Leit'rim.
E. Meath.	Queen's County.	May'o.	Roscom'mon.
W. Meath.	Kildare'.	Sli'go.	
Long'ford.	Dub'lin.		

The division into provs. is derived from the old native kingdoms, but only the cos. (which are never termed shires) are recognised for the purposes of gov. **Ulster** is the most populous and flourishing prov., being the ch. seat of the national industry. **Leinster** is the most productive, but with fewest good hars. **Munster** is the largest prov., and **Connaught** the smallest and least populous. **Cork** is the largest co.; **Louth**, the smallest; **Carlow**, the least populous; **Kerry**, the most mountainous. **King's and Queen's Cos.**, with their towns, &c., were named after Queen Mary, of England, and her husband, Philip II. of Spain. **E. and W. Meath** once formed the kingdom of Meath. The coast of **Antrim** abounds with basaltic columns. **Donegal**, from its wild mts. and moors, styled the "Black North of Ireland." **Londonderry**, anc. name, **Derry**; estates mostly held by the 12 London companies, to whom Jas. I. granted the lands of the co.; hence the prefix *London*. **Limerick**, remarkably fertile in the E., which is called the "Golden Vale."

EXERCISES.—Name the cos. surrounding Tyrone, Roscommon, Kildare, Tipperary. What divides Connaught from Leinster? What part of Gt. Britain does Connaught resemble most? Which co. not in Connaught belongs most naturally to it? Which cos. would be traversed by lines drawn (1) due W. from Dublin and (2) bet. the extreme pts. N.E. and S.W.? Name the most central co. of Ulster,—of Ireland.

INLETS.

NORTH COAST.

Lough Foyle, bet. **Londonderry** and **Donegal**.

L. Swilly, in the N. of **Donegal**.

WEST COAST.

Donegal' B., S.W. of **Donegal**.

Sligo' B., N. of **Sligo**.

Killa'la B., bet. **Sligo** and **Mayo**.

Broadha'ven, **Blacksod B.**, and **Clew B.**, W. of **Mayo**.

SOUTH COAST.

Kinsale' & Cork Hars., S. of **Cork**.

You'ghal Har., bet. **Cork** and **Waterford**.

Wa'terford Har., bet. **Waterford** and **Wexford**.

EAST COAST.

Wexford Har., S.E. of **Wexford**.

Dub'lin B., E. of **Dublin**.

Dundalk' B., N.E. of **Louth**.

Carlingford L., bet. **Down** and **Louth**.

Gal'way B., bet. **Clare** and **Galway**.

Mth. of the Shan'nion, S. of **Clare**.

Tralee' B., **Dingle B.**, and **Kenmare' B.**, W. of **Kerry**.

Ban'try B., S.W. of **Cork**.

Dundrum' B., and **Strang'ford Lough**, E. of **Down**.

Belfast' L., bet. **Down** and **Antrim**.

Lough (Scotch *Loch*) is used either for a lake or an arm of the sea. About 70 inlets on the Irish coasts form excellent hars., and 14 are unsurpassed. **Strang'ford L.**, is the deepest and best on the E. coast; **Belfast L.**, the most commercial.

ISLANDS.

NORTH COAST.

Rath'lin I., N. of **Antrim**.

WEST COAST.

N. Is. of Ar'ran, W. of **Donegal**.

Ach'il I. and **Clare I.**, W. of **Mayo**.

S. Is. of Ar'ran, S.W. of **Galway**.

Blask'et Is. and **Valen'tia**, W. of **Kerry**.

SOUTH COAST.

Cape Clear I., S.W. of **Cork**.

Gt. Cove I., in **Cork Har.**

PENINSULAS.

The Mul'let, N.W. of **Mayo**.

Connemâ'ra, W. of **Galway**.

Valentia, E. terminus of the Atlantic Telegraph Cable; once possessed by the Spaniards. **Blasket Is.**, the most westerly land in Europe, except the **Azores**. **Connemara**, the wildest district in Ireland.

EXERCISES.—Which prov. has most inlets? Which least? What is the name used for Estuary in the N.? and what in the S.? Which important inlets are most nearly opposite each other? Name from the map the other islands. Which Is. are at the mouths of bays? Which lie off headlands? Point out other principal pens.,—one N., nine W., three S., five E.

CAVES.

NORTH COAST.
Fair Hd. and Bengore Hd., N.
of Antrim.
Mal'in Hd., N. of Donegal.

WEST COAST.
Bloody Foreland and Ros'san
Pt., in Donegal.
Er'ris Hd. and Ach'il Hd., in
Mayo.
Slyne Hd., in Galway.
Loop Hd., S.W. of Clare.

Ker'ry Hd. and Dunmore Hd.,
W. of Kerry.
Crow Hd. and Miz'en Hd., S.W.
of Cork.

SOUTH COAST.
Cape Clear, S. of C. Clear I.
Carnsore Pt., S.E. of Wex-
ford.

EAST COAST.
Wick'low Hd., E. of Wicklow.
Howth Hd., E. of Dublin.

W. of Bengore Hd. is the **Giant's Causeway**, a platform consisting of about 40,000 basaltic columns stretching into the sea.



GIANT'S CAUSEWAY.

EXERCISES.—Name the extreme pts. N., S., E., and W., N.E., S.W., S.E., and N.W. Which two pts. are at the mth. of the Shannon? Which two are due E. and W. of each other? Which are nearest Scotland and England? Draw a map shewing the foregoing Outlines.

MOUNTAINS.

In ULSTER—		Highest smts.
Mourne Mts., S. of Down, . . .		SlieveDon'ard, (2796.)
Glenocum Mts., in Antrim, . . .		Mt. Thros'tan.
Carnto'gher Mts., in Londonderry and Tyrone,		Mt. Sa'well.
Donegal Mts., . . .	Mt. Er'rigal, Muckish', Slievesnaght'.	
In CONNAUGHT—		
Neph'in Beg Mts., in Mayo, . . .		Mt. Neph'in.
Connema'ra Mts., in Mayo and Galway,		Muilre'a, (2688,) Croagh Patrick, Twelve Pins.

IN MUNSTER— Highest smts.
Ker'ry Mts., Mt. Bran'don, (3120,) Macgillicuddy's Reeks, Carn-
 tu'al, (3404,) and Mangerton.
Cork Mts., . . . Sheehy, Boghra, and Nagles Mts.

IN LEINSTER—
Tipperra'y and Wa'terford Mts., Galtee', (3007,) Knockmeledown'
 and Com'meragh Mts.
Blackstairs' Mts., bet. Carlow and Wexford, Mt. Leinster.
Wick'low Mts., . . . Lugnaquilla, (3039.)
Slieve Bloom' Mts., bet. King's and Queen's Cos.

The **Wicklow Mts.** abound with fine scenery. The **Gt. Central Plain**, from Dublin B. to Galway B. and from Londonderry to Waterford, forms $\frac{1}{4}$ of the whole country. The **Bog of Allen**, (250,000 acres of morass,) occupies Kildare, King's Co., Meath, and Roscommon.

EXERCISES.—Arrange these mountains in the order of their heights. Which are the highest in their respective provs.? Which mts. form a continuation of the Central range? Where are the mts. arranged in parallel ranges? What capes form the terminations of the Glenocum, Donegal, Brandon, and Sheehy Mts.? Which corner of Ireland is not mountainous? Which mts. separate coas.? Draw a map of the mt.-system.

RIVERS.

RIVER.	RISES IN.	FLows.	THROUGH.	FALLS INTO.	Length
Shan'non, .	N. W. of Cavan,	S. & W.,	{The border cos. of Leinster, Con- naught, Munster,	{The Atlan- tic, . .	254
Blackwa'ter,	Borders of Kerry,	E. & S.,	Cork & Waterford,	{Youghal Har.,	100
Suir, . . .	{SlieveBloom Mts.,	S. & E.,	{Tipperary and Waterford,	{Waterford Har.,	100
Bar'row, . .	" "	S.,	{Kildare, Carlow, Wexford, King's Co., & Kilkenny,	{Waterford Har.,	90

MINOR RIVERS.

N. Slope.—Bann and Foyle.
W. Slope.—Erne.

S.E. Slope.—Ban'don, Lee, & Sla'ney.
E. Slope.—Lif'ey, Boyne, Lag'an.

TRIBUTARIES.

SHANNON.—r. b.—Suck and Fergus; l. b.—Inny, Bruma, Maigue, and Deel.
BARROW.—r. b.—The Nore, from Queen's Co. and Kilkenny.
BOYNE.—l. b.—The Blackwater, from Cavan.

River Basins.—The five largest basins are those of the Shannon, (7,000 sq. m.) Barrow, Erne, Bann, Foyle, and Suir, together equal to one-half of the entire area of the country.

The principal Irish rivers have their source and course in the great Central Plain, and are, therefore, in general, navigable, but they are of no great commercial importance. The Bann is called the Upper Bann above L. Neagh, and the Lower Bann below it. The Shannon—the largest river in the British Is.—rises in the 'Shannon Pot.' The rapids of Doona, above Limerick, interrupt its navigation, but this is obviated by means of short canals. The Barrow, Nore, and Suir are termed the "Three Sisters."

EXERCISES.—Trace the great axis or watershed of Ireland from Mizen Hd. to Fair Hd. Which mts. lie in the line of this watershed? Name the streams that unite to form the Foyle. Which rivs. rise in Lakes, and which expand

into Lakes? Which rivs. separate coas.? What prevents the Shannon from flowing into the Barrow? Trace the watersheds of the Shannon basin. How many coas. does the Shannon touch? Which river from source to mouth is connected with all the four provs.?

LAKES OR LOUGHS.

L. Ne'agh, bet. Antrim and Tyrone.	L. Cor'rib, in Galway.
L. Derg, S.E. of Donegal.	Is. Allen, Baffin, Ree, and Derg, on the line of the Shannon.
Is. Gow'na and Oughter, in Cavan.	Is. of Killar'ney, in Kerry.
L. Erne, in Fermanagh.	L. Shee'lin, bet. Cavan and E. and W. Meath.
L. Conn, in Mayo.	Is. Dere'veragh, Ow'el, and En'nill, in W. Meath.
L. Mask, bet. Mayo and Galway.	

The lakes of Ireland are large and numerous, and, except the Lakes of Killarney, have their shores tame and level or marshy. L. Neagh, the largest in the British Is.,—153 sq. m.; its waters remarkable for their petrifying qualities. L. Derg, in Donegal, has a small island with a cave called "St. Patrick's Purgatory,"—a noted place of pilgrimage for Irish R. C.'s. L. Erne consists of an Upper and a Lower Lake, studded with Is., and united by the chan. of the R. Erne. L. Corrib and L. Mask, (8 m. apart,) connected by a subterranean chan. Lakes of Killarney, consisting of an Upper, a Middle, and a Lower Lake, connected with each other; picturesque scenery.

EXERCISES.—How do the Irish lakes differ in form from the Scottish? Why? How much larger is L. Neagh than L. Lomond? How many coas. border on L. Neagh? How many rivs. flow into L. Neagh? State upon what rivers or in what river-basins these lakes are situated. Which of them are connected with mts.?

Climate.—The climate of Ireland is remarkably mild and moist, owing to its insular situation, and its exposure to the influences of the Gulf Stream and the westerly winds that blow for nine months of the year. Ireland is more humid than England; and it is neither so warm in summer nor so cold in winter. Plants which require artificial heat in England flourish in Ireland in the open air.

PRODUCTIONS.—1. Minerals.—Ireland has considerable mineral wealth, but it is little wrought, chiefly for want of good coal. The greater part of the coal is anthracite, which burns without flame.

Iron is abundant in the basin of the Shannon; copper and lead are found in Cork, Kerry, Waterford, and Wicklow; zinc, in the silver mines of Tipperary; black-marble in Connemara, Kilkenny, and elsewhere; rock salt, at Carrickfergus on Belfast L.; and roofing-slates and building-stones are extensively distributed.

2. Vegetation.—Ireland, from the humidity of its climate, is better adapted for pasture than for the raising and ripening of grain crops, and is therefore devoted to the rearing of cattle, and dairy husbandry. The vegetation is proverbial for its verdure, which has conferred on the country the names of "Green Erin" and the "Emerald Isle." The soil is naturally fertile; and there are rich agricultural districts in the alluvial valleys of Kilkenny, Tipperary, and Limerick; but husbandry, although improving, has long been in a backward condition,

About $\frac{1}{3}$ of the whole surface is occupied with bog, consisting of turf or peat, used extensively as fuel. From the trunks of oak, yew, pine, and birch, found in these bogs, various ornamental articles are formed. The potato formed the chief crop and food of the peasantry till its failure in 1845-6-7. Flax is extensively cultivated in Ulster.

3. Animals.—No animal of the serpent tribe, moles, or toads, are found in Ireland.* The bones and horns of a gigantic elk, now extinct, are found in the bogs. The pig is an inmate of the peasant's cabin, and is carefully tended as "the gentleman that pays the rent."

PEOPLE.—The pop. is nearly all of Celtic origin; but in Ulster most of the inhabitants are of Scotch descent, and remarkable for intelligence and industry. The native Irish language, spoken in some parts of the S. and W., is a Celtic dialect, cognate with the Gaelic of the Scottish Highlands, and the Manx of the I. of Man.

Episcopacy was, till 1871, the established religion, and Presbyterianism is strong in Ulster, but the great mass of the pop. are R. C.—The Irish are distinguished from the English by their dark complexion, more slender form, and volatile temperament.

The education of the people was neglected till 1833, when a national system was established, open to children of all the religious persuasions.

Government.—Ireland was conquered by Henry II., in 1172, and united to Gt. Britain in 1801. The laws and their administration are nearly the same as in England.

Industries.—The chief industry is agriculture, $\frac{4}{5}$ of the pop. being engaged in it. The manufacturing industry is very trifling, except the staple mnf., linen, which prevails chiefly in Ulster.

The other industries of minor importance, are:—cotton mnf. and muslin embroidery, also in Ulster; lace, about Limerick; woollen stuffs, in the centre of the country; silks, called *poplins*, in Dublin and Waterford. Malt-trade, and whisky-distilling are important. Mining—coal, copper, and lead. Salmon and eels from the rivs. and estuaries supply the Eng. markets.

Exports.—Agricultural produce, ore, spirits.

Imports.—Coal, fish, salt, woollen and cotton yarn and fabrics, &c.

TOWNS.—I. ULSTER.

Down.—Downpat'rick, Don'aghadee, New'ton-Ards, New'ry.

Antrim.—Carrickfer'gus, Belfast', Lis'burn, Ballymena.

Londonderry.—Lon'donderry, Coleraine'.

Donegal.—Lifford, Ballyshan'non, Letterken'ny.

Fermanagh.—Enniskil'len.

Cavan.—Cavan, Beltur'bet, Cootehill'.

Monaghan.—Mon'aghan, Clones, Carrickmacross'.

Armagh.—Armagh', Lur'gan, Portadown'.

Tyrone.—Omagh', Strabane', Dungannon.

* In the vale of Glendalough, amid the Wicklow Mts., is the "Lake of Serpents," so called because tradition says that St. Patrick drowned in it all the serpents then found in Ireland.

Downpatrick, ('Mt. of Patrick,') considered the oldest city in the country. **Newry**, partly in Armagh. **Belfast**, ch. town in Ulster; the second city of Ireland in size, and the first in trade and mnfs. **Londonderry**, an anc. walled town. **Coleraine** (*Col-rain*) has the largest salmon and eel fisheries in Ireland. **Lifford**, the smallest co. town in Ireland. **Enniskillen**, beautifully situated on a hilly island on the chan. bet. the Upper and the Lower Erne. **Monaghan**, (*Mon'-a-han*), extensive trade in linen and pigs. **Armagh** (*Armáw*) was the ecclesiastical cap., its Archbishop being primate of all Ireland. **Omagh**, (*Omáw*).

II. LEINSTER.

Louth.—**Dundalk'**, **Dro'gheda**.
E. Meath.—**Trim**, **Nav'an**, **Kells**.
W. Meath.—**Mullingar'**, **Athlone'**.
Longford.—**Long'ford**, **Granard'**, **Edge'worthstown'**.
King's Co..—**Tullamore**, **Philipstown'**, **Birr**, or **Par'sonstown**.
Queen's Co..—**Ma'ryborough**, **Mountmel'lick**, **Portar'lington**.
Kildare.—**Athy'**, **Kildare'**, **Na'as**, **Maynooth'**.
Dublin.—**DUBLIN**, **King'stown**, **Balbriggan**.
Wicklow.—**Wick'low**, **Ark'low**, **Bray**.
Wexford.—**Wex'ford**, **Enniscor'thy**, **New Ross**.
Carlow.—**Car'low**, **Tul'low**.
Kilkenny.—**Kilken'ny**, **Call'an**.

Drogheda, (*Dro'heda*), an old historic town—cotton and linen mnf. **Edge'worthstown**—so named from the family of Maria Edgeworth, the novelist. At **Birr Cas.** is the famous monster telescope of the Earl of Rosse. **Athy**, (*A-thi'*). **Kildare**: its "curragh," or common, nearly 5000 ac., is a famous race-course. **Maynooth** has a famous R. C. college. **Dublin**, the cap., one of the finest cities in Europe, has few mnfs., but great export trade. **Kingstown**, 6 m. distant, is the port of Dublin. **Balbriggan**, hosiery. Near **Arklow** is a wood named 'Shillelah,' famous for oaks and black thorns, from which the celebrated Irish weapon has received its name. **Kilkenny**, the largest inland town of Ireland; woollen mnfs.; streets paved with black marble.

III. MUNSTER.

Tipperary.—**Clonmel'**, **Car'rick-on-Suir**, **Cash'el**, **Thurles**, **Tipper'a'ry**, **Nenagh'**.
Waterford.—**Wa'terford**, **Portlaw'**, **Dungar'van**, **Lis'more**.
Cork.—**Cork**, **Queen'stown**, **You'ghal**, **Fermoy'**, **Kinsale'**, **Ban'don**.
Kerry.—**Tralee'**, **Din'gle**, **Killar'ney**.
Limerick.—**Lim'erick**, **Rathkeal'e**.
Clare.—**En'nis**, **Kilrush'**, **Killa'loe**.

Clonmel', an anc. town, with large export trade, and numerous flour mills. **Cashel**, built round the 'rock of Cashel,' crowned with the largest and most famous collection of ruins in Ireland—a cath., an abbey, a chapel, a cas., a round tower, &c. **Cork**, the third largest city in Ireland—numerous mnfs. and shipbuilding. Near **Cork** is **Cas. Blarney**, with a projecting rock, which is said to impart the gift of "blarney" to the person that kisses it. **Queenstown** or **Cove**, on **Gt. Island**, chief port of Cork, first place called at by steamers from America. **Spike I.**, S. of **Gt. I.**, is a convict station. **Youghal**, (*You-hall*), a watering-place, with salmon fisheries. **Killarney**, much frequented by tourists. **Limerick**, fourth city in Ireland, lace mnf., extensive trade. **Ennis**, fine black marble.

IV. CONNAUGHT.

Galway.—**Gal'way**, **Tu'am**, **Loughre'a**, **Ballinasloe'**.
Mayo.—**Castlebar'**, **West'port**, **Ballina'**.

Sligo.—Sli'go.

Leitrim.—Car'rick-on-Shan'non.

Roscommon.—Roscom'mon, Boyle, El'phin.

Galway, the principal town in Connaught, largest seaport in the W. of Ireland, splendid har.; **Ballinasloe** has the largest cattle and sheep fair in Ireland.

EXERCISES.—Give the towns on the coast, specifying their locality. Group the others according to the rive. on which they stand. Which two towns are partially in one of the cos. of Connaught? Draw out a Table of River Basins, with towns in them. Give the distances from Dublin of Drogheda, Belfast, Londonderry, Sligo, Galway, Limerick, Cork, Waterford, Kilkenny. Which town is most central? Which cos. have co. towns of the same name with the co.?

TOWNS ACCORDING TO POPULATION.

The Six Largest Towns.		Towns bet. 10,000 and 20,000 of Population.	
Dublin, . . .	246,000	Kingston, . . .	16,000
(with suburbs, 296,000)		Drogheda, . . .	14,000
Belfast, . . .	174,000	Kilkenny, . . .	13,000
Cork, . . .	78,000	Galway, . . .	13,000
Limerick, . . .	40,000	Wexford, . . .	12,000
Londonderry, . .	25,000		
Waterford, . . .	23,000	Newry, . . .	11,500
		Clonmel, . . .	11,000
		Sligo, . . .	10,500
		Tralee, . . .	10,000
		Dundalk, . . .	10,000

PLACES OF HISTORIC INTEREST.

A.D.

Londonderry ,—famous for its siege by Jas. II.,	1689
Boyne Water , nr. Drogheda,—Wm. III. def. Jas. II.,	1690
Vinegar Hill , nr. Enniscorthy,—Lord Lake def. rebels,	1798
Limerick ,—noted for numerous sieges, and the Treaty of Limerick,	1691
Rathlin I. ,—formed a place of retreat to King Robt. Bruce.	
Dungannon ,—chief residence of the O'Neils, the old kings of Ulster.	
Hill of Tara , nr. Trim,—once a rendezvous of the Irish for national purposes.	
Cashel ,—old cap. of the kingdom of Munster.	
Downpatrick ,—burial-pl. of St. Patrick, patron saint of Ireland.	
Youghal ,—Sir Walter Raleigh introduced the culture of the potato.	
Dangan Cas. , 3 m. S. of Trim,—b.p. of the first Duke of Wellington.	
Falias , (Co. Longford),—b.p. of Oliver Goldsmith, the poet.	
Derrynane , N. of Kenmare R.,—b.p. and residence of Daniel O'Connell, "the political agitator."	

Colleges.—Trinity, (Dublin,) Queen's Cols. at Belfast, Cork, Galway; Maynooth.

Military Stations.—Dublin, Athlone, Longford, Fermoy.

Chief Seaports.—Dublin, Belfast, Cork, Galway, Londonderry, Waterford.

Salmon Fisheries.—Coleraine, Ballyshannon, Ballina, Kinsale, Youghal, Dungarvan, Galway.

Bathing Places.—Bray, Wicklow, Kinsale, Dungarvan.

Mineral Wells.—Mallow, Ballynahinch, (Co. Down,) Golden Bridge, (nr. Dublin,) Cas Connell, (nr. Limerick.)

Markets.—Ballinasloe and Mullingar, (cattle,) Roscommon, (corn,) Boyle, (corn and butter.)

RAILWAYS.

<i>Lines.</i>	<i>Chief Towns on the Route.</i>
Dublin, Wicklow, & Wexford.	—Dublin, Wicklow, Wexford, Waterford.
Gt. Southern & Western.	—Dublin, Kildare, Carlow, Kilkenny; Cork, Bandon, Kinsale; Killarney, Tralee; Limerick, Ennis.
Midland Gt. Western.	—Dublin, Mullingar, Athlone; Galway; Castlebar, Westport, Sligo.
Dublin & Drogheda, &c.	—Dublin, Drogheda, Navan; Dundalk, Belfast.
Ulster Line.—Belfast, Lisburn, Portadown, Omagh, Londonderry.	

COUNTRIES OF CONTINENTAL EUROPE.

(Revise "Europe," pages 28-37.)

SCANDINAVIA, (NORWAY AND SWEDEN.)

General Aspect.—The W. coast, lined with a vast multitude of islands, is remarkable for its deep indentations, named *fjords*; the Swedish sea-board is low and sandy. The Scandinavian Alps traverse the pen., the snow-clad summits consisting of high plains, termed *fyelds* or "fields." The rivers on the W. are short, wild, ungovernable mountain torrents, abounding with cataracts, and plentifully stocked with salmon; on the E. the numerous rivers seek a straight course to the Baltic over successive terraces, and form numerous narrow lakes in their course.

PROVINCES AND TOWNS.

I.—NORWAY.

Aggershuus or Christian'ia.—	Ber'gen.—Ber'gen.
CHRISTIAN'IA, Frederick-	Trond'hjem.—Trond'hjem, Ro-
shald', Dram'men, Kong'sberg.	ra'as.
Christiansand'.—Christiansand',	Nord'land.—No town.
Stavan'ger.	Fin'mark.—Hammerfest'.

II.—SWEDEN.

Goth'land.—Goth'enburg, Mal'-	STOCK'HOLM, Upsa'la, Fah'lun,
moe, Carlscro'na, Cal'mar,	Dannemo'ra.
Norr'köping.	Norr'land, with Swe'dish Lap'-
Svea'land or Sweden Proper.—	land.—Gefle.

Largest Towns.—In Norway.—Christiania, 65,000; Bergen, 30,000; Drontheim, 19,000. In Sweden.—Stockholm, 131,000; Gothenburg, 53,000; Norrköping, 23,000; Malmö, 23,000.

CHRISTIANIA, a small city with a royal palace and univ.; ch. seat of the foreign trade. **Frederickshald**, a strong fortress, in which Charles XII. of Sweden was killed in 1718. **Kongsberg**, silver mines. **Bergen**, (pron. *Berg'-gen*), ch. commercial city of Norway; ch. exports, dried fish. **Trondhjem** or **Drontheim**, anc. cap., with active trade; chiefly built of wood. **Boräsa**, extensive copper mines. **Hammerfest**, the most northerly town in Europe.

Gothenburg, the second city in Sweden for pop. and commerce; **Norrköping**, noted for broadcloths, is the third. **Carlscrona**, ch. naval station. **STOCKHOLM**, a fine city, partly built on islands; houses of brick or painted wood. **Upsala**, anc. cap., with a famous univ. **Fahlun**; great copper mines. **Dannemora**: the largest iron mines in Sweden.

CLIMATE AND PRODUCTIONS.—The climate is varied, but on the W. comparatively mild, while Sweden suffers from extremes of temperature. In the N. winter lasts nine months, and the sun is not visible for some weeks, while, for a similar period in summer, he never sets. At Hammerfest barley may be sown and reaped within six weeks. **Vegetation.**—The soil is poor, and not more than one-fifth of it under cultivation. Barley is the principal crop. Forests of pine and birch cover the larger part of the surface. The ch. minerals are iron, copper, and silver—the iron-mines of Sweden, in the middle division of the country,

being celebrated. The ch. industry is fishing in Norway, and the ch. exports are iron, timber, tar, and dried fish.

PEOPLE.—The Swedes and Norwegians are closely allied in race and language, as well as religion, which is chiefly Lutheranism. They are well educated, especially the Swedes, every man being a minor in the eye of the law till he can read the Bible. The two countries are now governed by the same king; but they have each their own laws and legislature. The Swedish representative assembly is called the *Diet*, the Norwegian the *Storting*.

DENMARK.

General Aspect.—The mainland is a pen. running N. bet. the Baltic and N. Seas. It is so largely penetrated by fiords that no part is more than 35 m. from the sea. Its surface is perfectly flat, sinking below sea-level in the N., and requiring to be protected from the sea by dykes, and nowhere rising more than 500 ft. There are extensive marshes, but no large rivers in the country. The islands on the E. block up the entrance to the Baltic, except three narrow channels.

PROVINCES AND TOWNS.

Jütland.—Aal'borg, (on Liim-fiord;) Aar'huus, (on the Cattegat.)
The Islands.—Co'penha'gen and Elsinore, (in Zealand;) Røskil'de, Odense'e, (in Fühnen.)

EUROPEAN DEPENDENCIES.

Farøe Isles.—Thorshavn'. | Iceland.—Reyk'ia'vik.

Largest Towns.—Copenhagen, 155,000; Odensee, 14,000; Aarhuus, 11,000; Aalborg, 10,000.

Aalborg, ('Eel-town,') so named from its abundance of eels. **COPENHAGEN**, ('Merchants' Haven,') an elegant city, strongly fortified; built partly on Zealand and partly on the small I. of Amak—the chan. between forming the harbour; has a univ. **Elsinore**: here passing vessels formerly paid toll, or sound-dues, to the King of Denmark. **Røskilde**, the anc. cap.; has a fine Gothic cath., the burying-place of the Kings of Denmark. **Thorshavn**, a village of about 100 wooden huts.

Iceland, area, 37,800 sq. m., or $1\frac{1}{5}$ larger than Scotland; pop., 66,000; surface mountainous; 30 vols., 8 of them active.—Mt. Hecla, 5,000 ft. high, the most famous; noted for boiling-springs, called 'Geysers.' No trees, and no crops except cabbage and potatoes. Glaciers, 4,000 sq. m. **Farøe Is.**, 22 in number, of which 17 are inhabited; coasts steep and rugged, interior mountainous; the natives engaged in fishing, fowling, and tending sheep.

CLIMATE, &c.—The climate is moist and cloudy, but milder than in more inland countries. The Is. and S. part of the mainland are the most fertile; the N. of Jütland is sandy and barren. The ch. industries are agriculture and fishing. There are no minerals and no mnfs., but home-spinning and weaving are largely practised by the peasantry. The people are brave, frugal, industrious, and well-educated. Elementary education is gratuitous, and the attendance compulsory. In race, language, religion, and gov., the Danes are closely related to the Swedes and Norwegians.

HOLLAND OR THE NETHERLANDS.

General Aspect.—Holland has a rhomboidal form, with large indentations at the three external corners. Forming the western extremity of the Gt. Pl. of Europe, the surface is uniformly flat, a considerable portion, indeed, being below the level of the sea, from which it is protected by natural embankments in the form of low sandhills called *dunes*, or artificially by means of dykes. Hence the names Holland, i. e., Hollow-land, and the *Nether-lands* or *Low Countries*. No rock, hill, or natural forest is to be seen, and scarcely a running stream, except in the S., which may be regarded as the vast delta of the Rhine, which here subdivides into five great branches.

The country presents the appearance of an immense network of canals bordered by dykes, upon which are formed excellent roads. Rows of trees line the canals and roads, and numerous windmills form prominent objects in the landscape.

The inlets Dollart B. and Lauwer Zee, as well as the lakes *Haarlem Meer* and *Bies Bosch*, were all formed by inundations. *Haarlem Meer* has been drained and converted into excellent pasture. When *Bies Bosch* was formed, 72 villages were submerged, and 100,000 persons drowned.

PROVINCES AND TOWNS.

- | | |
|---|---|
| N. Holland. — Amsterdam,
Haar'lem, Zaan'dam, Alk-
ma'er, Hel'der. | Gel'derland. — Arn'heim, Nim'-
eguen. |
| S. Holland. — The Hague, Ley-
den, Delft, Rot'terdam, Dort,
Gou'da. | Overy'ssel. — Zwolle, Zut'phen,
Dev'enter. |
| Zealand. — Mid'delburg, Flush'-
ing. | Friesland. — Leuwar'den. |
| N. Brabant'. — Bois-le-duc, Bre'da. | Grön'ingen. — Grön'ingen. |
| U'trecht. — U'trecht, Am'ers-
foort. | Dren'the. — As'sen. |
| | Dutch Limburg. — Maes'tricht. |
| | Dutch Luxemburg. — Lux'em-
burg. |

Largest Towns.—Amsterdam, 271,000; Rotterdam, 118,000; The Hague 90,000; Utrecht, 60,000. Twelve others have each more than 20,000 of pop.

AMSTERDAM, on the R. Amstel and Y (Y pron. like English I); the commercial cap., and one of the greatest commercial cities in Europe; houses of brick painted of various colours, and built on piles of wood; canals in the centre of the streets intersect the city into 95 islands connected by 290 bridges. **Haarlem**: gt. trade in flowers and flower-roots; b. p. of Laurence Coster, the reputed inventor of printing. **Zaandam** or **Saardam**: Peter the Great of Russia wrought here as a ship-carpenter; near it the village of **Broek**, (pron. *Brook*), famous as the cleanest place in the world. **Alkmaer**: great cheese-market and an annual swan-fair; 8 m. N.W. is **Camperdown**, a village off which the Eng. def. the Dutch in 1797. **The Helder**, very strongly fortified, guards the entrance to the Zuyder Zee. **The Hague**, (3 m. from N. Sea,) the political cap., being the seat of the court and the gov.; an elegant city. **Leyden**, (*Old Rhine*), has a famous univ.; largest linen and woollen mnfs.; famous for its siege by the Spaniards in 1574. **Delft**, once famous for pottery, hence called *delf*. **Rotterdam**, second city in Holland, intersected by canals. **Dort**, or **Dordrecht**, famous for an ecclesiastical synod in 1618; rendezvous of timber-rafts floated down the Rhine from the German and Swiss forests. **Gouda**, famous for its cheese-market and tobacco pipes. **Middelburg**, (*I. of Walcheren*), famous for the invention of the telescope. **Brda**, strongly fortified, famous for sieges and congresses. **Utrecht**, (*Old Rhine*), famous for treaties; has important mnfs. **Zutphen**, (*Yssel*), famous for the death of Sir Philip Sydney in battle, 1586. **Maestricht**, (*Maas*), a first-class fortress, with vast underground stone-quarries. **Luxemburg**, once one of the strongest fortresses in Europe, now dismantled.

CLIMATE AND PRODUCTIONS.—The atmosphere is raw and foggy, and unhealthy to foreigners; the winters are generally severe, the Zuyder Zee being often frozen over in Jan., and the canals for three months. **Vegetation.**—The richest soil is in the south, where flax is extensively cultivated, and tobacco in Utrecht and Gelderland; but $\frac{3}{4}$ of the whole area are in pasture, for which it is best adapted. Horticulture has long been a favourite employment. There are no minerals, except potter's clay, fuller's earth, and peat.

PEOPLE.—The Dutch are a branch of the Teutonic race; in religion $\frac{3}{4}$ are Prots. of the Reformed Church. Education is well conducted and very widely diffused. The people have excelled in the fine arts and various departments of learning, and were at one time the leading maritime and commercial power in Europe. They are still remarkable for industry, cleanliness, and commercial enterprise.

Ch. Industries.—Dairy-farming, commerce, ship-building, distillation, horticulture, &c.

Ch. Exports.—Dairy produce, refined sugar, tobacco, flax, bulbous roots, gin, &c.

BELGIUM.

General Aspect.—Belgium is of triangular form. The coast, only 40 m. in length, is protected from the sea by sandhills, and the interior by dykes along the larger rivers. The surface is low and level in the N. and W., undulating in the centre, with rising grounds in the S. and E. The whole territory and many of the cities are intersected by canals.

PROVINCES AND TOWNS.

S. Brabant. —Brus'sels, Louvain'.	Hainault. —Mons, Tournay'.
Ant'werp. —Ant'werp, Mech'lin.	Namur. —Namur'.
E. Flan'ders. —Ghent, St. Nic'o-las.	Lie'ge. —Lie'ge, Verviers', Spa.
W. Flan'ders. —Bruges, Ostend', Courtrai', Ypres'.	Lim'burg. —Hasselt', St. Trond.
	Luxemburg. —Arlon'.

Largest Towns.—Brussels, 163,000; Antwerp, 123,000; Ghent, 116,000; Liege, 101,000. Twelve others have each more than 20,000.

BRUSSELS, (*R. Senne*), a very beautiful stone-built city; once famous for carpets, and still famous for lace, the finest in the world; 9 m. S. is the Field of Waterloo, where the British def. the French in 1815. **Antwerp**, (in French, *Anvers*), on the R. Scheldt, ch. commercial city of Belgium; has a splendid cath., with spire 466 ft. high; was the residence of Rubens and other famous artists. **Mechlin**, (in French, *Malines*), a picturesque old Flemish city; has fine lace mnf.; centre of the Belgian railway system. **Ghent**, (pron. *Gang*), on the Scheldt, built on 26 islands, with 309 bridges; strongly fortified; ch. seat of cotton mnf.; extensive flower-culture; b.-p. of John of Gaunt and the Emperor Charles V. **Bruges**, (pron. *Brish*), so named from its numerous *bridges* over canals; lace and linen mnf.; antique buildings and historic associations. **Ostend**, second port; ch. seat of herring fishery; summer watering-place; mail packet station for England. **Courtrai** and **Ypres**, fine linen mnf.; **Ypres** gives name to *diaper*. **Mons**, a strong frontier town, with large coal and iron mines. **Tournay**, (in Flemish, *Doornick*), great seat of mnfs., especially Brussels carpets. **Namur**, (at confluence of Meuse and Sambre), mnf. of cutlery and fire-arms; in the midst of coal, iron, and lead mines, and marble quarries. **Liege**, (pron.

Le-aish.) on the Meuse, has the largest cannon foundry in Europe; has coal, iron, lead, and alum mines, and slate and marble quarries. *Verriers*, ch. seat of woollen muf. *Spa* has chalybeate springs, the strongest in Europe; was formerly one of the most fashionable watering-places on the continent.

Belgium has been styled the "Battle-field of Europe," from the numerous battles fought on its soil. The most famous are Waterloo, Ramillies, Oudenarde, Courtrai, Tournay, Charleroi, Fontenoy, and Jemappes, with the sieges of Antwerp, Ostend, and Namur. Twenty-two of its towns are fortified.

CLIMATE AND PRODUCTIONS.—The climate is cool and moist, and unhealthy in the low parts of Flanders. The soil, not naturally fertile, has been rendered so productive that Belgium has been styled the Garden of Europe. **Vegetation.**—The ordinary crops, besides the common cereals, are flax, (for linen and lace muf.,) clover, (for its seed,) beet-root, (for sugar,) oil-seed, madder, &c. In Hainault, Namur, and Liege, are extensive forests, and mines of coal, iron, and zinc, producing more coal than any other part of the continent, and one-half of all the zinc used in Europe.

PEOPLE.—The people consist of two races—Flemings, of the Teutonic (or German) stock in the N., forming $\frac{2}{3}$ of the whole pop., and the Walloons, of Celtic (or French) extraction. Belgium is the most densely peopled country in Europe. The Flemish and Walloon dialects are spoken, but French is the language of literature, the legislature, and the educated classes. In religion almost the whole pop. are R. C. Education is well advanced, and music is much cultivated by all ranks. In character the people exhibit a mixture of French liveliness and Dutch industry.

Ch. Industries.—Agriculture, metal-working, horticulture, mufs. of woollen, linen, lace, paper, beet-root sugar, &c.

THE GERMAN EMPIRE.

Germany proper is that large portion of Central Europe occupied by people of the German race. In that sense it includes all Prussia except the two N.E. Provs., 26 Minor German States, Limburg and Luxemburg, and the Nine Western Provs. of Austria.

General Aspect.—The whole is of a square, compact form. The coast-line of the Baltic (800 m.) is very low, and covered with extensive lagoons. The surface in the N., forming part of the Great Plain of Europe, is low and level; in the centre is diversified with hilly ranges and plateaux of no great height, and in the S. is highly mountainous, being traversed by five principal groups or ranges of the Alps. The rivers are large, and navigable almost to their sources.

The German Empire now consists of two great divisions, viz.:—

- I. The Kingdom of Prussia; and
- II. The Minor German States, 26 in number,

I.—PRUSSIA.

PROVINCES AND TOWNS.

POLISH PRUSSIA.

Prussia Proper.—Königsberg, Mem'el, Dan'zig; El'bing, Til'sit.
Posen.—Po'sen, Brom'berg.

MIDDLE PROVINCES.

Sile'sia.—Breslau', Glogau', Lieg'nitz, Gör'litz.
Pomera'nia.—Stettin', Greif'swald, Stral'sund.
Brand'enburg.—BERLIN', Potsdam', Brand'enburg; Frank'furt.
Prussian Sax'ony.—Mag'deburg, Wittenberg, Hal'le, Hal'berstadt,
 Eisle'ben, Er'furt.

WESTERN PROVINCES.

Schles'wig-Hol'stein.—Schles'wig, Flens'burg; Kiel, Rends'-
 burg, Al'tona.
Lau'enburg.—Lau'enburg.
Han'over.—Han'over, Göt'tingen, Claus'thal, Os'nabrück, Em'den.
Westpha'lia.—Mün'ster, Min'den, Dort'münd.
Rhine Prov. or Rhenish Prussia.—Cologne', Bonn, Coblent'z;
 Düs'seldorf, Cre'feld, El'berfeld, Bar'men, Es'sen; Treves,
 Aix-la-Chapell'e.
Hesse-Nassau.—Cas'sel, Wiesbad'en, Hanau', Frank'furt-on-the-
 Main.
Hohenzollern, (in S. Germany.)—Sigmaring'en, (a mere village.)

Largest Towns.—Prussia has 25 towns with pop. bet. 20,000 and 50,000; 12 bet. 50,000 and 100,000; and 4 above 100,000, viz.,—Berlin, 702,000, Breslau, 172,000, Cologne, 125,000, Königsberg, 106,000.

Königsberg, (near the Frische Haff,) former cap.; exports corn, timber, and flax. **Memel,** great exports of corn and timber. **Danzig,** (near G. of Danzig,) ch. seaport and one of the greatest corn-shipping ports in the world. **Til'sit,** memorable for Treaty of Peace, 1807. **Breslau,** (R. Oder,) ch. seat of the linen mofs. of Silesia; greatest wool-fair in Europe. **Stettin,** (near Stettiner Haff,) second seaport. **BERLIN,** in the centre of a flat sandy plain; finest city in Germany; important and varied mofs.; famous univ. **Potsdam,** a royal residence, with palace of 'Sans Souci'; ch. station of the army; b. p. of Humboldt, the philosopher. **Frankfurt-on-the-Oder:** three great annual fairs. **Mag'deburg,** (R. Elbe,) strongest fortress in Germany; gt. commerce and mofs.; a gt. railway centre. **Wittenberg,** where Luther began the Reformation, 1517; contains the tombs of Luther and Melancthon. **Eisleben,** where Luther was born, 1483; **Er'furt,** where he resided. **Cologne (Rhine):** splendid Gothic cath.; bridge of boats across the Rhine; distilled waters called 'Eau de Cologne.' **Bonn:** famous univ. **Coblent'z,** named from its position at the *confluence* of the Moselle and Rhine; fine scenery; large exports of wine. **Düs'seldorf:** a river-port for shipping the industrial products of the district. **Elberfeld** and **Bar'men:** gt. linen, silk, and cotton mofs. **Gre'feld:** silks and velvets. **Es'sen:** gt. coal and iron works. **Treves,** oldest city in Germany. **Aix-la-Chapelle,** (in German, *Aachen*), near the Belgian frontier; famous for hot-baths, treaties, and the residence of the Emperor Charlemagne. **Cassel:** gt. mofs. **Wiesbaden:** hot mineral springs. **Frank'furt,** former seat of the German Diet; a free city till 1806; gt. inland trade; famous for banking; b. p. of Goethe, the poet.

II.—MINOR GERMAN STATES.

1. NORTH GERMAN STATES.

(Arranged in the order of their size.)

Kingdom of Sax'ny.	Dy. of Saxe-Al'tenburg.
Gd. Dy. of Meck'lenburg-Schwe'rin.	Py. of Lip'pé-Det'mold.
Gd. Dy. of Old'enburg.	Py. of Wal'deck.
Dy. of Brun'swick.	Py. of Schwartz'burg-Ru'dolstadt.
Gd. Dy. of Saxe-Wei'mar.	Py. of Schwartz'burg-Son'dershausen.
O'ber-Hes'sen, (part of Hessen-Darmstadt.)	Py. of Reuss-Schleitz.
Gd. Dy. of Meck'lenburg-Strelitz.	Py. of Schaum'burg-Lip'pé.
Dy. of Anhalt.	Py. of Reuss-Greiz.
Dy. of Saxe-Mein'ngen.	Free City of Ham'burg.
Dy. of Saxe-Co'burg-Go'tha.	Free City of Lü'beck.
	Free City of Bre'men.

These states are about the size of Eng. cos.,—varying from Saxony, less than Yorkshire, to Bremen, 74 sq. m., equal to a large parish.

2. SOUTH GERMAN STATES.

Kingdom of Bava'ria.	Gd. Dy. of Hes'sen-Darm'stadt.
Kingdom of Wür'ttemberg.	Py. of Liech'tenstein, (S. of L. of Constance.)
Gd. Dy. of Bad'en.	
Imp. Prov. of Alsace'-Lorraine'.	

STATES AND TOWNS.

Saxony.—Dres'den, Meis'sen, Leip'zig, Frei'berg, Chem'nitz.

Mecklenburg.—Schwe'rin, Ros'tock, Wis'mar.

Brunswick.—Brunswick.

Saxe-Weimar.—Wei'mar, Je'na, Eis'enach.

Saxe-Coburg-Gotha.—Go'tha, Co'burg.

Free Cities.—Ham'burg, Lü'beck, Bre'men.

Bavaria.—Mu'nich, Re'gensburg, Aug'sburg, Würz'burg, Bam'berg, Nürn'berg; Spey'er or Spire.

Württemberg.—Stutt'gart, Heil'bronn, Tu'bingen, Ulm.

Baden.—Carlsru'he, Mann'heim, Heid'elberg, Frei'burg, Bad'en.

Bad'en, Constance'.

Alsace-Lorraine.—Stras'burg, Metz, Mül'hau'sen.

Hessen-Darmstadt.—Darm'stadt, Mentz, Worms; Hom'burg.

Largest Towns.—The Minor German States have 24 towns with pop. bet. 20,000 and 50,000; 9 bet. 50,000 and 100,000; and 3 above 100,000, viz.:—Ham'burg, 225,000, Munich, 170,000, Dresden, 156,000.

The **Free Cities, or Hanse Towns**, were at one time 85 in number. The Hanseatic League, formed for the protection of commerce, was very powerful in the 15th century.

Dresden (Elbe): fine buildings and noble art-collections. **Meissen (Elbe):** mfn. of the fine porcelain known as 'Dresden China.' **Leip'zig**, ch. seat of the German book-trade; three gt. annual fairs; here the Allies def. Napoleon I. in 1813. **Frei'berg**, ch. town of the German mining district. **Chemnitz**, ch. seat of mfn. in Saxony. **Brunswick, Weimar, and Gotha**, distinguished for litera-

ture and science. **Hamburg**, (*Elbe*), largest and most commercial city in Germany. **Bremen**, (*Weser*), second commercial city. **Lübeck**: gt. fairs and commerce; anc. cap. of the Hanseatic League.

Munich, (in German, *München*): numerous splendid buildings, libraries, art-collections, and mnfs. of philosophical instruments; near it *Hohenlinden*, where the French def. the Austrians in 1800. **Regensburg**, or **Ratisbon**, seat of the Imperial Diet, 1662-1806; near it the 'Walhalla,' a splendid Doric temple of marble, designed to contain statues of distinguished Germans. **Augsburg**: here the Reformers presented their Confession of Faith to Charles V., in 1530. **Nürnberg**, or **Nuremberg**, ch. seat of mnfs. in Bavaria; famous for the invention of the watch, musket, clarionette, &c.; makes toys and wooden clocks. **Spire**, (in German, *Speyer*): splendid cath.; here in 1529 the Reformers presented their protest to the Diet, from which they were called 'Protestants.' At **Blenheim**, (a village on the Danube,) the Eng. under Marlborough def. the French in 1704. **Stuttgart**, surrounded with hills clothed with vineyards and gardens; gt. seat of the book-trade; a public library, with 12,000 Bibles, in 68 languages. **Tübingen** has been the residence of many literary men; near it the b.-p. of Schiller, the poet. **Carlsruhe**: from the grand ducal pal. the 32 principal streets diverge like the rays of a fan. **Heidelberg**, (*Neckar*), famous for the 'Tun of Heidelberg,' the largest wine-cask in the world, capable of holding 5,000 gallons; has a univ. **Baden-Baden**, much frequented for its warm mineral springs. **Constance**, (*L. of Constance*), famous for the Council, 1414-18, which condemned the Reformers, John Huss and Jerome of Prague, to the flames. **Strasburg**, strong fortress; famous cath., with spire 466 ft. high and astronomical clock; capitulated to the Germans, Sept., 1870. **Metz**, very strong fortress, surrendered to the Germans, Oct., 1870. **Mülhausen**, or **Mulhouse**: gt. cotton mnf. **Mentz**, or **Mayence**, (*Rhine*), strongest fortress in Germany; b.-p. of Gutenberg, a reputed inventor of printing, 1440. **Worms**: Luther first appeared at the Diet held here in 1521. **Homburg**, (in Ober-Hessen,) mineral springs and baths; notorious for gambling.

CLIMATE AND PRODUCTIONS.—In the N. the winters are long and severe; in the S. the summer heat of the valleys is often intense, but the general temperature, on account of the greater elevation of surface, is not greater than in the N., and there is much less rain. The minerals are extensive and varied, and there are numerous mineral springs much frequented. The *Erzgebirge* and *Hartz Mts.* abound in iron, copper, silver, lead, &c. Amber is found as a fossil-resin on the Baltic coast. **Vegetation.**—Timber is very plentiful—the hills being well wooded, whence they are commonly named 'walds,' (i. e., *woods*.) Flax and hemp are largely grown for mnfs., besides tobacco, hops, and beet-root. The vine is largely cultivated, chiefly in the valleys of the Middle Rhine and its tribs.

Ch. Industries.—Agriculture, mnfs. of cloth, iron goods, china, glass, toys, &c. **Ch. Seats of Industry.**—Silesia, Hanover, and Westphalia, for linens; Saxony and Rhenish Prussia, for woollens.

Exports.—Corn, wool, timber, iron, and manufactured goods.

PEOPLE.—In all the states education is highly-advanced, in Prussia and other states school attendance being compulsory; and universities are unusually numerous. In religion $\frac{2}{3}$ of the people are Protestants, the others being chiefly R. C., especially in the S. In gov. the German Empire is a confederation of states for all purposes of commerce, and of offence and defence, the king of Prussia being head, under the title of emperor. The states possess a common parliament, and a common fleet and army under the sole command of Prussia; but each state has the management of its own internal affairs.

AUSTRIA.

General Aspect.—The general form of Austria is oblong. Its coast-line of 480 m., confined to the Adriatic, is broken into numerous but unimportant islands. Of the surface $\frac{3}{4}$ are mountainous, with three great mt.-systems, viz.:—the Alps, the Bohemian Mts., and the Carpathians. Its main artery is the Danube, flowing through extensive plains—but at least four other large rivers have their upper course within its bounds.

PROVINCES AND TOWNS.

I. GERMANIC PROVINCES—9.

Bohe'mia.—Prague, Pil'sen, Kön'iggrätz.
Mora'via.—Brünn, Ol'mütz, Aus'terlitz.
Austrian Sile'sia.—Troppau.
Lower and Upper Austria.—VIEN'NA; Linz.
Salzburg and Sty'ria.—Salzburg; Grätz.
Illy'ria.—Klag'enfurt, Lay'bach, Id'ria, Triest'e.
Tyrol'.—Inns brück, Trent.

II. HUNGARIAN PROVINCES—6.

Hun'gary Proper.—Bu'da, or O'fen, Pesth, Pres'burg; Schem'nitz, Tokay', Kecskem'et, Szeged'in, Debrec'zin.
Transylva'nia.—Klau'senburg, Kron'stadt, Her'mannstadt.
Ban'nat and Ser'via.—Tem'esvar; Zom'bor, Theresian'opol.
Slavo'nia and Croa'tia.—Es'zek, Peterwar'dein; Agram', Fiu'me'.
Dalma'tia.—Za'ra, Spala'tro, Ragusa.
Military Frontier.—Sem'lin, Orso'va.

III. POLISH PROVINCE—1.

Galic'ia and Buckowi'na.—Lem'berg, Bro'dy, Cracow', Czern'owitz.

Largest Towns.—The Austrian Empire contains 21 towns with pop. bet. 20,000 and 50,000, 7 bet. 50,000 and 100,000, and 3 above 100,000, viz.:—Vienna, 579,000, Prague, 142,000, Pesth, 131,000.

Prague, a noble and antique city. **Königgrätz**, (*Elbe*): near this the battle-field of **Sadowa**, where the Prussians def. the Austrians, 3rd July, 1866. **Brünn**, ch. seat of woollen mfs. **Austerlitz**, (a village,) Napoleon I. def. the Russians and Austrians in 1805. **VIENNA**, (*Danube*), one of the largest and finest cities in Europe; ch. seat of mfs. in Austria. **Salzburg**: salt-mines; b.-p. of Haydn and Mozart, the great composers. **Klagenfurt**: extensive white-lead mfs. **Idria**: famous quicksilver mines. **Trieste**, ch. sea-port. **Trent**, famous for Council, 1545-63, for settling the tenets of the R. C. Church.

Buda and Pesth, united by a suspension bridge, form one large town, the cap. of the Km. of Hungary; Buda, old and irregular, Pesth, the finest city in the Km. **Presburg**, seat of the Hungarian Diet. **Schemnitz**, ch. of the mining towns; has gold, silver, copper, and iron. **Tokay**, famous for sweet wines. **Peterwardein** received its name from Peter the Hermit, who here marshalled the soldiers of the First Crusade. **Orsova**, 3 m. E. are the "Iron Gates," of the Danube, a series of rapids bet. high and steep rocks, in a defile of the Carpathians.

Lemberg, a large city, with important transit-trade and fair. **Cracow**, anc. cap. of Poland, with cath. containing the tombs of the kings of Poland; has a mound of earth, 150 ft. high, to the memory of the Polish hero, Kosciusko, collected from the battle-fields of Poland; near it **Wieliczka**, with the most celebrated salt-mines in the world.

CLIMATE AND PRODUCTIONS.—The climate is temperate, but varies with locality. The Alpine region is one of the rainiest in Europe. The minerals are more varied and valuable than those of any other part of Europe. Vegetation.—One-fourth of the surface is occupied with forests, and one-third is under cultivation. Besides the common crops there are raised rice, maize, hops, and tobacco. Hungary and Galicia are the ch. corn-growing districts. More wine is produced than in any other country of Europe, except France. Wild animals abound in the mts., such as the bear, wolf, lynx, wild-boar, and chamois. Neusiedler See abounds with leeches, and silk-worms are reared in the S. The ch. industries are agriculture and mining. Bohemia is famous for the mnf. of glass and linen.

PEOPLE.—The pop. consists of four races—German, Sclavonian, Roumanian or Italian, and Magyar. The Sclavonians are the most numerous; the Magyars predominate in Hungary; Jews abound in the cities, and Gipsies are numerous. The languages comprise nine dialects. Education is widely diffused—instruction being gratuitous, and school attendance compulsory. Almost every prov. has its own manners, customs, and character. In religion $\frac{2}{3}$ of the people are R. C., the remainder being of the G. Ch. or Prot.—chiefly the former. Gov.—The Austrian Empire is now known officially as the Austro-Hungarian Monarchy. In the German portions are Provincial Diets for local gov., while a Central Diet, or Reichsrath, legislates for general purposes. The Km. of Hungary has a separate constitution and an independent Diet.

SWITZERLAND.

General Aspect.—Switzerland is somewhat elliptical in form. The surface is exceedingly mountainous, and is the highest inhabited land in Europe. More than half the area is covered with the central Alps in the S.; on the W. are the Jura Mts.; while from S.W. to N.E. is a plateau 135 m. in length. The surface is further diversified with numerous large valleys and beautiful lakes, and thousands of streams foaming in torrents and cascades. From the mt. knot of St. Gothard rises the central water-system of Europe, flowing N., W., S., and E. The mts., from 9000 to 15,000 ft., are covered with perpetual snow and glaciers, and the whole scenery is distinguished for sublimity and beauty.

Alpine Chains.—Pen'nine, Helve'tian or Lepon'tine, Rhæ'tian, Berne'se. The Lepontine has the grandest scenery, and is most visited. Mt. Blanc, in the Pennines, 15,744 ft., is in France; Monte Rosa, 15,208 ft., is the highest smt. in Switzerland.

Alpine Passes.—Pass of Gt. St. Bernard, 8150 ft., crossed by Napoleon I. with his army in 1800; celebrated for its hospice or convent, whose monks, assisted by their famous breed of dogs, afford succour to travellers; the hospice the highest habitation in Europe. Cervin or Matterhorn Pass, 10,038 ft., the highest, and passable only by mules. Simplon Pass, 6,592 ft., constructed by Napoleon I. Pass of St. Gothard, 6,976 ft., one of the best and most frequented. The Stelvio, 9,100 ft., in Austria, is the highest carriage-way in Europe.

CANTONS AND TOWNS.

WESTERN CANTONS—7.

Bâle.—Basle or Bâle.
 Soleur'e.—Soleur'e.
 Berne.—BERNE.
 Neufchatel'.—Neufchatel'.
 Fribourg'.—Fribourg'.
 Vaud.—Lausan'ne.
 Gene'va.—Gene'va.

SOUTHERN CANTONS—3.

Valais'.—Sion', Martigny'.
 Ticino'.—Luga'no.
 Grisons'.—Coire or Chur.

NORTH-EASTERN CANTONS—6.

St. Gall.—St. Gall.
 Appen'zell.—Appen'zell.
 Thurgau'.—Frauenfeld'.
 Schaffhan'sen.—Schaffhau'sen.
 Zü'rich.—Zü'rich.
 Aargau'.—Aargau'.

CENTRAL CANTONS—6.

Lucern'e.—Lucern'e.
 Unterwal'den.—Sar'n'en.
 U'ri.—Altorf'.
 Glä'rus.—Glä'rus.
 Schwytz.—Schwytz.
 Zug.—Zug.

Largest Towns.—Most of the towns are mere villages. Four have a pop. bet. 10,000 and 20,000; and five with more than 20,000, viz.:—Geneva, 41,000, Bâle, 33,000, Berne, 29,000, Lausanne, 21,000, Zürich, 20,000.

Bâle, (pron. *Bäh*): once noted for literature; seat of a famous Church Council, 1431-37. **BERNE**, seat of the Federal Diet; a handsome town. **Neufchâtel**, (pron. *Nushatel'*, and means, 'New-Castle'): gt. trade and watchmaking. **Fribourg**: fine cath. and suspension bridge. **Lausanne** and **Lucerne**: fine scenery; at Lausanne Gibbon wrote his *Roman History*. **Geneva**: jewellery and watches; once the residence of many eminent men, Reformers and others, especially Calvin. **Schaffhausen**, (pron. *Shaf-hou'sen*): 8 m. below are the celebrated Falls of the Rhine. **Zürich**, (*ch = k*): a place of refuge to the Reformers in the 16th century; Zuinglius the Reformer was pastor here. **Glarus**: gt. exports of cheese. **Altorf**, the village where William Tell, the Swiss patriot, shot the apple off his son's head.

University Seats.—Bâle, Berne, Zürich.

Seats of Mnfs.—St. Gall, Appenzell, Zürich, Glarus.

Battle-fields.—**Morat**, (Fribourg): the Swiss def. Chas. the Bold of Burgundy in 1476. **Sempach**, (Lucerne): 1,400 Swiss def. 4,000 Austrians in 1386. (1476.)

Morgarten, (bet. Schwytz and Zug): 1,300 Swiss def. 20,000 Austrians in 1315.

CLIMATE AND PRODUCTIONS.—Owing to the great elevation of Switzerland the climate is severe, and presents great extremes. More snow falls than in any other European country of the same lat. The vegetation varies with elevation, from rhododendrons and lichens just below the snow-line (8900 ft.) to the fig and vine in the warm valleys beneath. The pastures are excellent, and support vast numbers of flocks and herds, which form the chief wealth of the people. The ch. industries are dairy-farming, mnfs. of cloth, watches, jewellery, musical boxes, &c.

The people are of Teutonic race in the N.E., and Celtic in the S. and W. French is the language spoken in the W., Italian in the S., and various dialects, chiefly of German, in the N.E. Education is widely diffused, especially in the Prot. Cantons, which are chiefly in the N. and W. The Swiss are hardy, brave, patriotic, and industrious. The gov. consists of a Federation of the 22 Cantons, comprising 25 states.

FRANCE.

General Aspect.—France is of hexagonal form, with a coast-line of 1500 miles, or about one-half of its whole boundary-line. The surface is level in the N., and mountainous in the S. and E. Three mt.-groups (the highest) are on the frontiers, and three are in the interior, running in a line from S.W. to N.E. The centre is a plateau occupying $\frac{1}{10}$ of the whole country. On the S.W. coast is a vast region known as the *Landes*, covered with marshes and shifting sands. The country has four slopes, viz.:—the N.W., W., S., and N.

PROVINCES * AND TOWNS.

I.—NORTHERN FRANCE—7 PROVS.

Flan'ders.—Lille, Valenciennes, Cambrai, Douay, Dunkirk'.

Artois.—Arras', St. Omer, Calais, Boulogn'e.

Picardy.—Amiens', Abbeville.

Normandy.—Rouen', Le Hav're, Diep'pe, Caen', Cherbourg.

Ile de France.—PARIS, Versailles, Fontainebleau', St. Quen'tin.

Champagn'e.—Chalons-sur-Marne, Rheims, Troyes, Sedan'.

Lorrain'e.—Nan'cy.

Lille, along with Roubaix, Turcoing, and Valenciennes: gt. mnfs. Cambrai gives name to *cambric*. Douay: here was issued the R. C. version of the Eng. Bible. Arras, long noted for tapestry. Calais, held by the Eng. for 200 years. Boulogne: many Eng. residents. Amiens, famous for Treaty of Peace, 1802. Rouen, (*Seine*;) cath. built by Wm. the Conqueror; Joan of Arc burnt here, 1431. Le Havre, port of Paris; gt. packet station. Caen: gt. mnfs; tomb of Wm. the Conqueror. PARIS, next to London, the largest and wealthiest city in Europe, and the first for fashion and refinement; splendid public buildings, works of art, and literary and scientific institutions. Versailles: magnificent royal pal., with pictures, gardens, and fountains. Rheims, or Reims: splendid Gothic cath. where the kings of France used to be crowned. Troyes: gt. fairs in the Middle Ages; hence our *Troy Weight*.

II.—MIDDLE FRANCE—16 PROVS.

Franche Comte'.—Besan'con.

Bur'gundy.—Dijon', Le Creuzot'.

Nivernais'.—Nevers'.

Berry.—Bourges.

Orléanais'.—Char'tres, Orléans.

Tourain'e.—Tours.

Anjou'.—Angers'.

Maine.—Le Mans.

Brit'tany.—Brest, L'Orient',

Rennes, Nantes.

Poitou'.—Poitiers'.

Aunis', Saintonge, and Angou-

mois'.—La Rochelle, Rochefort, Angoulême, Cognac'.

Marche.—Gueret'.

Bourbon'nais.—Moulins'.

Lyon'nais.—Lyon', St. Etien'ne.

Auvergu'e.—Clermond' - Fer-

rand'.

Limousin'.—Limo'ges, Tulle.

Besancon: clocks and watches. Le Creuzot: largest mnf. of iron rails and locomotives in the world. Dijon: ch. depôt and market for Burgundy wines. Orléans, (*Loire*;) fine old town with gt. inland trade. Tours: silk mnfs. Angers: gt. mnfs. and slate quarries. Brest: ch. naval station. Nantes: gt. commercial city; famous for the Edict of Nantes issued in 1598. Cognac: gt.

* Since the French Revolution in 1789 France has been divided into Departments, now 86 in number, which vary little in size, and have generally been named from some striking natural feature of the district, such as a river or mt. But for historical and general interest the old division into Provinces is most convenient.

exports of brandy. **Lyon**, (*Rhône*;) second city in France for pop. and commerce; first for mfrs. **St. Etienne**: ribbons, cutlery, and fire-arms. **Clermont-Ferrand**, in the midst of the volcanic region of Auvergne; built of lava; has warm springs. **Limoges**: porcelain and paper. **Tulle**: extensive national factory for fire-arms.

III.—SOUTHERN FRANCE—12 PROVS.

Guien'ne .—Bordeaux', Montau'-ban.	Proven'ce .—Marseill'e, Toulon'. Comta't d'Avignon'.—Avignon'; Orang'e.
Gas'cony .—Tarbes.	Dau'phiné .—Gren'oble, Vien'ne.
Béarn .—Pau, Bayon'ne.	Sav'oy .—Cham'bery, Chamou'ni.
Foix .—Foix.	Nice .—Nice, Cannes.
Roussillon .—Perpignan'.	Cor'sica .—Ajac'cio, Bas'tia.
Languedoc .—Toulous'e, Montpel'lier, Nîmes.	

Bordeaux, the largest and most commercial city in the W. of France; gt. exports of wine, brandy, and dried fruits. **Montauban**, a ch. seat of Protestantism in France. **Pau**, a favourite winter residence for invalids; b.-p. of Henry IV. of France, (Henry of Navarre,) and John Bernadotte, king of Sweden. **Bayonne**: the bayonet invented here, and hence so named. **Toulouse**, (*Garonne*;) gt. mfrs.; largest cannon foundry in France. **Montpellier**, a fine city, noted for its mild and salubrious climate. **Nîmes**: fine Roman remains. **Marseille**, ch. sea-port of France; founded by Greek colonists, 600 B.C. **Avignon**, residence of the Popes, 1329-76; 17 m. E. is **Vaucluse**, long the residence of the Italian poet, Petrarch. **Grenoble**: gloves, liqueurs, and perfumes. **Chamouni**, the village whence travellers start to ascend Mt. Blanc. **Nice**, (pron. *Nees*;) an early seat of Christianity in Europe; b.-p. of Garibaldi, the Italian hero. **Cannes**, long the residence of Lord Brougham and many Eng. residents. **Ajaccio**, b.-p. of Napoleon I. in 1769.

Largest Towns.—France has 61 towns with more than 20,000 of pop.,—the N. being the most populous and having most large towns. Of these, 13 have bet. 50,000 and 100,000, viz.:—St. Etienne, Brest, Toulon, Le Havre, Roubaix, Amiens, Rheims, Nîmes, Montpellier, Angers, Limoges, Nice, Nancy; while 8 have above 100,000, viz.:—Paris, 1,825,000, Lyon, 324,000, Marseille, 300,000, Bordeaux, 194,000, Lille, 155,000, Toulouse, 127,000, Nantes, 112,000, Rouen, 100,000.

Fortresses.—Paris, Lyon, Lille, Toulon, Brest, Cherbourg.

Naval Stations.—Brest, Toulon, Rochefort, Cherbourg, L'Orient.

Seaports.—Marseille, Le Havre, Bordeaux, Nantes, La Rochelle, Dunkirk.

Watering-Places.—Boulogne, Vichy, Pau, Biarritz, Montpellier, Nice, Cannes.

Royal Palaces.—Tuilleries and St. Cloud, (Paris,) Versailles, Fontainebleau.

Universities.—Paris, Poitiers, Toulouse, Montpellier.

Ch. Seats of Industry.—Rouen, (cotton,) Reims and Amiens, (woollen,) Lyon, (silk,) St. Etienne (iron and ribbons,) Bordeaux, (wines,) Paris, (jewellery, perfumes, gloves, &c.) Lille, (linen,) Caen, (lace.)

Battle-fields .—Tours,—Charles Martel def. the Saracens.	A.D. 732
Cressy, (near Abbeville),—Ed. the Black Prince def. the French.	1346
Poitiers,—The Black Prince def. the French.	1356
Agincourt, (Artois),—Henry V. of England def. the French.	1415
Orleans,—Besieged by the Eng. and saved by Joan of Arc.	1428
Toulouse,—Wellington def. the French.	1814
Sedan,—Napoleon III., with 100,000 men, surrendered to the Germans, 2d September.	1870

CLIMATE AND PRODUCTIONS.—The climate is in general temperate and healthy. The S. is a great winter resort for invalids. The chief crops are wheat, the vine, sugar-beet, and tobacco; the wines of Bordeaux, Burgundy, and Champagne being the most famous. The S. is rich in the mulberry, olive, citron, fig,

orange, &c. Coal and iron are widely distributed. The ch. industries are agriculture, mnfs., and commerce; but agriculture is not well understood; the land is greatly subdivided, and the landowners are poor. In mnfs. and commerce France is excelled only by Britain. All the great rivers are connected by canals, and Paris is the centre of a great railway system. The ch. exports are wines, brandy, silks, lace, gloves, olive oil, and fruits.

The people are professedly R. C., but all religions are endowed by the state. The French are lively, intelligent, distinguished for taste in the arts, and fond of military glory. The gov. is at present a Rep., but revolutions have been frequent.

SPAIN.

General Aspect.—Spain occupies $\frac{5}{6}$ of the Iberian or Spanish Peninsula, which is of a square form and very compact. The surface consists of a great plat. in the centre, nearly half the area of Spain, and more than 2000 ft. high. The whole pen. is traversed in a general direction from E. to W. by five great mt. ranges, called *Sierras*, forming the watersheds of five large rivers, all of which, with one exception, flow westwards to the Atlantic.

PROVINCES * AND TOWNS.

I.—ON THE N. COAST.

Basque Provs.—Bilba'o, San Sebastian, Vito'ria.	Astu'rias.—Ovie'do.
Old Castile.—Bur'gos, Santander, Valladolid, Segovia.	Gali'cia.—Santia'go, Ferrol', Corun'na.

II.—INLAND.

Leon'.—Leon', Salaman'ca, Ciudad Rodri'go, (<i>c=th.</i>)	Ar'agon.—Saragos'sa, (or Zaragoza'za,) (pron. <i>Tharagotha.</i>)
Estremadu'ra.—Bad'ajos', (<i>j=h.</i>)	Navarra.—Pamplona, (or Pamplu'na.
New Castile.—MADRID', Toled'o, Talave'ra, Alma'den.	

III.—ON THE E. AND S. COASTS.

Catalo'nia.—Barcelo'na, [Andor'ra.]	Grana'da.—Grana'da, Mal'aga.
Valen'cia.—Valen'cia, Alicant'e.	Andalu'sia.—Seville, Cordova,
Mur'cia.—Mur'cia, Cartage'na.	Ca'diz, Xe'res, Pa'los, [Gibraltar.]

IV.—ISLANDS.

Bear'ic Is.—Pal'ma, Port Mahon'.	Canary Is.—Santa Cruz, Las Pal'mas.
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Largest Towns.—Spain has 21 towns with pop. from 20,000 to 50,000; 2 from 50,000 to 100,000, viz.:—Sagossa and Cadiz; 3 above 100,000, viz.:—Madrid, 475,000, Barcelona, 252,000, Cordova, 160,000, Seville, 152,000, Valencia, 145,000, Malaga, 115,000, Murcia, 109,000, Granada, 100,000.

* Spain is now divided into 49 provs. named after their principal towns, but formerly it consisted of 14 gt. divisions, many of them styled kingdoms.

Bilbao: gt. exports of wool. **Santander,** sea-port; iron mines. **Valladolid,** now much decayed; here Columbus died, 1506. **Segovia:** a Roman aqueduct of 161 arches. **Santiago:** famous cath. dedicated to St. James, (Santiago,) the patron saint of Spain; long a place of pilgrimage. **Corunna,** whence sailed the Spanish Armada, 1588.

MADRID, cap. since 1563; in the centre of a barren plain; N.W. from Madrid is the pal. of the **Escorial**, built in the form of a gridiron. **Toledo,** an old cap.; once famous for sword-blades. **Almaden:** quicksilver mines.

Barcelona, ch. sea-port, with gt. mnfs.; founded 200 B.C. **Valencia,** ch. seat of silk mnfs. **Andorra,** in the N.W. of Catalonia, in a small valley of the Pyrenees, cap. of the small republic of Andorra, numbering about 5,000 of pop., chiefly shepherds. **Murcia:** mnf. of gunpowder. **Cartagena,** ch. arsenal of Spain; founded by a Carthaginian colony, 242 B.C. **Granada,** old cap. of the Moors in Spain; famous for the remains of the magnificent pal. of the Alhambra. **Malaga:** gt. exports of wines, raisins, and other fruits. **Seville,** cap. of Spain under the Goths; finest Gothic cath. in Spain; largest tobacco and cigar factory in Europe. **Cordova,** for many centuries a Moorish cap.; magnificent mosque, now a cath.; long noted for mnf. of leather, (hence called *cordovan*.) **Cadix,** (on the I. of Leon,) founded by the Phœnicians, 1100 B.C.; ch. seat of commerce; centre of trade in *sherry* wine, which is chiefly made at **Xeres**, (pron. *Hâ-res*,) whence it receives the name. **Palos,** a small port whence Columbus sailed in 1492 for the discovery of America. **Gibraltar,** on a rock nearly 1,500 ft. high, strongest fortress in the world, and the 'Key to the Medit.' belongs to Britain, and is famous for its numerous sieges; pop. 15,000.

Santa Cruz, exports wine and cochineal.

Ch. Fortresses.—San Sebastian, Badajoz, Pamplona, Cadiz.

Ch. Arsenals.—Cartagena, Ferrol, Cadiz, Barcelona.

Ch. Sea-ports.—Barcelona, Valencia, Malaga, Cadiz, Bilbao.

Universities.—Salamanca, Valencia, Saragossa, Valladolid, Barcelona.

Battle-fields.—**Corunna,**—Sir John Moore, after repulsing the French, fell, 1809

Salamanca,—The Eng. under Wellington def. the French, . . . 1809

Ciudad Rodrigo,—The Eng. under Wellington def. the French, . . . 1812

Badajoz,—Stormed and taken by Wellington, . . . 1812

Talavera,—Brit. and Spanish armies def. the French, . . . 1809

Saragossa,—Made a desperate resistance against the French, 1808-9

C. Trafalgar,—Nelson def. the French and Spanish fleets, but fell in the action, . . . 1805

CLIMATE AND PRODUCTIONS.—The central table-land is subject to droughts and extremes of heat and cold; the plains around the coast are warm. Agriculture is in a backward state, and $\frac{3}{5}$ of the soil are under pasture. The interior is in general barren and treeless, but the cultivated plants in the plains are the vine, olive, fig, orange, mulberry, wheat, rice, and sugar-cane. The cork-tree abounds in the forests, and the palm in the S. Among animals the horses of Andalusia are celebrated, the mules and asses are of great size and beauty, and vast numbers of merino sheep are reared for their wool, which is of the finest quality. Spain is rich in minerals, especially iron, copper, lead, quicksilver, and coal, but they are little wrought. The ch. industries now are the wine-trade in the S., and iron-working in the N. The ch. exports are wool, wine, brandy, olive oil, fruits, cork, lead, and mercury.

The people, who are most numerous in the S., are very ignorant and superstitious. Dancing and bull-baiting are favourite national amusements. Spain was at one time the foremost nation in Europe for maritime enterprise and discovery; and for three centuries held Mexico, Central America, and nearly all S. America.

PORTUGAL.

General Aspect.—The coast-line of 500 m. is but little broken. The surface has a lower elevation than that of Spain, the drainage of three of the largest rivers of the pen. being carried through it; and its two mt. ranges are continuations of Spanish ones.

PROVINCES AND TOWNS.

Min'ho.—Bra'ga, Opor'to.	Estremadu'ra.—Lis'bon, Setu'bal.
Tras-os-Mon'tes.—Bragan'za.	Alente'jo.—Evo'ra, El'vas.
Bei'ra.—Coim'bra.	Algar've'.—Fa'ro.

ISLANDS.

Azores'.—An'gra.	Madai'ras.—Funch'al'.
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Largest Towns.—Portugal has only 9 towns with pop. between 20,000 and 50,000; and 2 above 50,000, viz.:—Lisbon, 275,000, Oporto, 80,000.

Oporto, (*moult of Douro*), a large commercial city, with mnfs. and gt. exports of wine, (hence known as *port* wine.) Braganza gives name to the royal family of Portugal. Coimbra, seat of the only univ. **LISBON**, (*r. b. of Estuary of the Tagus*), built on an amphitheatre of hills; a large part of it destroyed by an earthquake in 1755, and 60,000 lives lost; mnfs. jewellery, and trinkets. N.W. of Lisbon is Cintra, famous for its scenery and for the 'Convention of Cintra,' in 1808, bet. the Brit. and the French. Setu'bal or St. Ubes: active exports of wine, oranges, cork, salt, &c. The Azores export oranges and wine. The Madeiras, famous for salubrity of climate and Madeira wines.

Battle-fields. —Bussaco, near Coimbra,—Wellington def. the French,	A.D.
Vimeira, (Estremadura),—Wellington def. the French,	1810
Torres Vedras, (Estremadura),—Wellington constructed his famous	1808
'Lines of Defence,'	
O. St. Vincent,—Sir John Jervis def. the Spanish fleet,	1810
	1797

CLIMATE, &c.—The climate is mild and healthy, and near the coast the rain-fall is very great—Coimbra being the rainiest locality in Europe. In productions, industries, and character of the inhabitants, Portugal greatly resembles Spain. It was rendered famous in the 15th century by its maritime discoveries and conquests; but its commerce, then extensive, has now greatly declined.

ITALY.

General Aspect.—The greater part of Italy is peninsular, resembling in form a high-heeled boot. The coast, generally bold, is not much indented, except in the S. The surface consists in the N. of a large plain watered chiefly by the Po, while the pen. proper is traversed through its whole length by the Apennines, which extend even into Sicily. Considerable plains extend along the coasts.

DIVISIONS * AND TOWNS.

NORTHERN ITALY.

Pied'mont.—Turin', Alessan'dria, Gen'oa, [Monâco.]
Lom'bardy.—Mil'an, Pav'ia, Cremona, Bres'cia, Bergamo.
Vene'tia.—Ven'ice, Pad'ua, Man'tua, Vero'na, A'dria.

* Italy is now divided officially into 69 provs. for administrative purposes.

PENINSULAR ITALY.

Emil'ia.—Par'ma, Mod'ena, Reg'gio, Bolog'n'a, Ferra'ra, Raven'na.
Tus'cany.—Flor'ence, Pi'sa; Luc'ca, Leg'horn.
Ro'man Provs.—ROME, Civ'ita Vec'chia.
Um'bria.—Peru'gia.
The Mar'ches.—Anco'na, Loret'to, Urbi'no, [San Mari'no.]
Na'ples.—Na'ples, Ga'eta, Saler'no, Reg'gio; Brindi'si, Ba'ri,
 Barlet'ta, Fog'gia.

ISLANDS.

Sic'ily.—Paler'mo, Messi'na, Cata'nia, Syr'acuse, Girgen'ti, Marsa'la.
Sardin'ia.—Cagli'ari, (*Cal-yd-rec,*) Sassa'ri.

Largest Towns.—Italy has 65 towns with pop. of 20,000 to 50,000; 11 bet. 50,000 and 100,000, viz.:—Leghorn, Catania, Ferrara, Lucca, Alessandria, Ravenna, Modena, Padua, Verona, Pisa, Reggio (Emilia); 10 above 100,000, viz.:—Naples, 447,000, Rome, 220,000, Turin, 205,000, Milan, 196,000, Palermo, 194,000, Genoa, 128,000, Venice, 118,000, Florence, 114,000, Bologna, 109,000, Messina, 103,000.

Turin, (Po.) noted for churches, literary institutions, and silk mnf. **Genoa,** large commercial city; silk mnfs.: b-p. of Columbus, 1435. **Monaco,** cap. of a small Py. **Milan,** an anc. large and beautiful city; cath. of white marble, with 4,500 statues; its theatre the largest in the world. **Cremona,** once famous for violins. **Venice,** in the 15th century the greatest maritime and commercial power in the world; built on piles, and occupying more than 70 islands, connected by 306 bridges; b-p. of Canova, the sculptor, and Titian, the painter. **Padua, (Po.)** b-p. of Livy, the Roman historian. **Mantua, (Mincio),** b-p. of Virgil, the Roman poet. **Verona, (Adige),** numerous Roman remains. **Adria,** an anc. seaport, now 14 m. inland; gives name to the Adriatic.

Reggio, (pron. Red-jio), b-p. of Ariosto, the poet, and Correggio, the painter. **Carara:** fine statuary marble. **Bologna, (Bolon-ya.)** **Ravenna,** cap. of Italy under the Goths: has the tomb of the poet Dante. **Florence, (Arno),** a beautiful walled city, amidst delightful scenery: finest galleries of art in the world; b-p. of Dante; late cap. of Km. of Italy. **Pisa, (Arno),** has a curious leaning tower; b-p. of Galileo, the philosopher. **Leghorn or Livorno,** gt. commercial city; coral fishery and straw-plait mnf. **Elba, (an island:)** residence of Napoleon I. 1814-15. **ROME, (Tiber),** one of the most renowned cities in the world; in anc. times had 1,000,000 of pop., and was mistress of the then known world; now the residence of the Popes, whose pal. is the Vatican; St. Peter's Cath., the largest in the world; many remains of anc. grandeur. **Civita Vecchia, (Chee-vita Vek-kia.)** **Loretto,** a celebrated shrine of the Virgin Mary. **Urbino,** b-p. of Raphael, the painter. **San Marino,** cap. of a rep., one of the smallest and most anc. states in Europe, area, 26½ sq. m., pop. 7,000, army 40 men, annual revenue £216. **Naples,** on the large and beautiful Bay of Naples; near it the ruins of **Heroulanseum** and **Pompeii,** two cities buried by an eruption of Mt. Vesuvius, A.D. 79. **Gasta, (Gæ-e-læ),** where Cicero, the Roman orator, was assassinated, B.C. 43, and to which Pope Pius IX. fled from Rome disguised as a footman, 1849. **Reggio,** very anc.; touched at by St. Paul on his voyage to Rome; the B. of Reggio is remarkable for the optical phenomenon of *Fata Morgana*. **Brindisi,** the anc. *Brundisium*, now a port of embarkation on the Overland Route for the East.

Palermo, founded by the Phœnicians; gt. commerce; in a valley near it grow the finest lemons in Europe. **Messina,** gt. commerce, and fine har. **Catania,** at the foot of Mt. Etna, built of lava, and often destroyed by earthquakes; silk mnfs. and gt. exports. **Syracuse:** the anc. Syracuse was a large and magnificent city; b-p. of Archimedes, the mathematician. **Girgenti,** noted for exports of sulphur; **Marsala,** for wines; **Trapani,** for coral and tunny fisheries; **Lipari, (Lipari Is.),** for exports of pumice-stone. **Caprea,** (a small I. off the N.E. coast of Sardinia), residence of Garibaldi.

Malta, (ch. town, Valet'ta,) belongs to Britain; a rocky island with an artificial soil; tropical produce; gt. naval station for the British fleet; scene of the shipwreck of St. Paul.

Fortresses.—Alessandria, Padua, Mantua, Venice, Verona, Gaeta, Capua.

Ch. Seaports.—Genoa, Leghorn, Naples, Palermo, Messina, Ancona, Venice.

Universities.—Turin, Padua, Bologna, Ferrara, Florence, Rome, Naples, &c.

Caps. of Reps. in the Middle Ages.—Venice, Genoa, Florence, &c.

Battle-fields.—**Marengo**, (nr. Alessandria,)—Napoleon I. def. the Austrians, 1800

Pavia,—Emperor Chas. V. def. Francis I. of France, 1525

Lodi, (Lombardy,)—Napoleon I. def. the Austrians, 1796

Magenta and Solferino, (Lombardy,)—French and Sardinians def. the Austrians, 1859

CLIMATE AND PRODUCTIONS.—The climate of Italy is the finest in Europe; the sky is clear and cloudless, and of a deep blue colour; but a noxious vapour called *malaria* prevails in summer and autumn in some marshy districts in the W., while the S. generally is subject to the *sirocco*, a hot pestilential wind from Africa. **Minerals** are plentiful, but little wrought—the most valuable being marble from quarries in the Apennines, and sulphur from Sicily. The vegetation is very varied, and the soil extremely fertile. The northern plains are highly cultivated, having the most extensive rice-fields in Europe; and in the S. rich fruits are the spontaneous produce of the soil. The ch. crops include wheat, maize, rice, the vine, mulberry, and olive. The chestnut of the forests of the Apennines is an important article of human food. **Animals**.—Mules, especially in the S., are more plentiful than horses, being better adapted for the mt. roads, which are all but impassable. The coasts of Sicily furnish sponges and coral; the bee and the silkworm are largely reared; and the S. abounds with scorpions, tarantulas, and other noxious reptiles. The ch. industries are agriculture and grazing, with mnfs. in the N. of silks, strawplait, artificial flowers, &c. The exports are silk, olive oil, wines, fruits, marble, sulphur, and strawplait.

The people excel in painting, music, and sculpture. The common people are ignorant, indolent, and superstitious; and in no country are beggars and brigands or banditti more numerous. But the various petty states of Italy are now united under one free constitutional gov., and the country is rapidly improving.

TURKEY IN EUROPE.

General Aspect.—The general form of Turkey is that of a trapezium, and its coasts are washed by five seas. The surface generally is an undulating region of hills, valleys, and plateaux of no great elevation, with the extensive plain of the Lower Danube in the N.E. more than twice the size of Scotland.

PROVINCES* AND TOWNS.

Roumelia.—**CONSTANTINO'PLE,**
Gallipoli, Salonika; **Adri-**
ano'ple, Philipopoli.
Bulgaria.—Sophia, Silistria,
Rustchuk; Shumla, Var'na.
Thessaly.—Laris'sa.
Albania.—Yani'na, Scu'tari.
Bos'nia, &c.—Bos'na-Serai.
Crete.—Can'dia.

TRIBUTARY STATES.

ROUMANIA, including—

1. **Wallachia.**—Bu'charest.
2. **Moldavia.**—Jas'sy, Isma'il,
Galatz'.

Servia.—Belgrade'.

Montene'gro.—No town.

Largest Towns.—Turkey has 19 towns with pop. bet. 20,000 and 50,000; and 6 above 50,000, viz.:—Constantinople, 1,075,000, Adrianople, 150,000, Bucharest, 122,000, Saloniki, 70,000, Bosna-Serai, 50,000, Gallipoli, 50,000.

Roumelia includes anc. Thrace in the E. and Macedonia in the W. **CON-STANTINOPLE**, (Turkish name *Stamboul*, anc. name *Byzantium*), built on a promontory bet. the Bosphorus and its inlet the 'Golden Horn,' which forms a splendid har.; external appearance very imposing, with many domes and minarets of mosques, interspersed with cypresses, but the houses are mostly of wood, and the streets narrow and dirty; mnfs. of morocco leather and meerschaum pipes: ch. seat of foreign commerce. **Gallipoli**, ch. naval station. **Salonika** or **Saloniki**, (the anc. *Thessalonica*), second commercial city; carpet mnf. **Adrianople**, (*Maritza*), former cap.; extensive mnfs. and dyeworks. **Philippopoli**, (*Maritza*), founded by Philip of Macedon; gt. commerce and mnfs. **Sophia**: gt. trade and mnfs.; hot springs and baths. **Shumla**, strongly fortified in a pass of the Balkans. **Yanina** or **Janina** (J=Y): S. of the Lake of Yanina stood the oracle and grove of Dodona, the most famous oracle of antiquity. **Bosnia**, includes Turkish Croatia and Herzegovina.

Bucharest, (*R. Dombrovitza*.) gt. commerce; notorious for gambling. **Jassy**, (near *R. Pruth*.) gt. trade in agricultural products. **Belgrade**, (at the confluence of the Danube and Save,) entrepôt of trade bet. Turkey and Austria; once famous as the scene of frequent struggles bet. the Turks and Christians, now much decayed. **Wallachia** and **Moldavia** are often styled the Danubian Principalities. These three trib. states are nearly independent—paying only a small or nominal tribute to the Sultan.

Fortresses.—Varna, Ismail, Silistria, Belgrade, Shumla, Gallipoli
Sea-ports.—Constantinople, Gallipoli, Salonika, Varna, Galatz.

CLIMATE AND PRODUCTIONS.—The climate is subject to greater extremes than that of any other country of S. Europe. In Roumania the sledge is used for winter travelling; but the W. and S., protected by mts. from N.E. winds, enjoy a delicious climate. The soil is exceedingly fertile, but not cultivated with skill; and a large portion of it is covered with forests. The favourite fruit-trees of our gardens grow spontaneously in the S. The ch. crops consist of wheat, rice, maize, cotton, the vine, mulberry, olive, orange, fig, and citron. **Animals.**—Herd of oxen and flocks of sheep and goats, along with bees, form the ch. wealth of Roumania; and the horses of Thessaly have been celebrated since the days of Alexander the Great. The minerals are iron, lead, salt, and marble, but none of them are worked to advantage. The ch. industries are mnfs. (chiefly for home consumption) of silks, cotton, carpets, leather, fire-arms, and dyeing of Turkey-red. The commerce, which is important, is almost entirely in the

* For administrative purposes Turkey is divided into *eyalets*, each governed by a *visier*, and these again into *sandjaks*, each governed by a *pasha*.

hands of Greeks, Jews, and Armenians. The ch. exports are cotton, wool, grain, fruits, carpets, rhubarb, tobacco, opium, &c.

The people consist of three distinct races:—Sclavonians, who are most numerous, Greco-Latins, and Turks, who are fewest, (forming only $\frac{1}{4}$ of the whole,) although they are the governing race all over the country. The Turks are Mohammedans, but the other two races are of the Gr. Ch.



TURKS SMOKING.

The people are generally poor, ignorant, indolent, and bigoted, especially the Turks; but the Christians display more energy and intelligence. The Turks dress in loose clothing, wear the beard, and sleep on carpets or sofas. Polygamy is universal, and they keep their women in rigorous confinement. Externally, the cities have an imposing appearance and oriental character, but the houses are mean, being mostly built of mud or wood, and without glass; and the streets are crooked, narrow, and dirty. The roads are few and bad, being generally nothing better than mule-paths. The Emperor is styled the Sultan, or Grand Seignior. The Council of State is termed the Divan, at the head of which are the Grand Vizier, or Prime Minister, and the Grand Mufti, or Primate. The whole of the Turkish Dominions are termed the Ottoman Empire, from Othman, or Osman, its founder; and the Turks, Ottomans or Osmanlis. From a lofty gate at the entrance to the Seraglio or Palace of the Sultan at Constantinople, the Turkish court is generally styled the 'Sublime Porte.'

GREECE.

General Aspect.—The form of Greece is highly peninsular. Its coast-line of 2000 m. presents the largest proportion of coast to area of any country in Europe. The surface is very mountainous, interspersed with numerous valleys and small plains. The streams are numerous, but rapid and unnavigable. Islands form an important and interesting feature of the country. The scenery of the whole is distinguished for its beauty.

The Is. consist of four groups:—1. Eubœa or Negropont; 2. The Sporades, N.E. of Eubœa; 3. The Cyclades; 4. The Ionian Is.

DIVISIONS AND TOWNS.

Hel'las or **Liva'dia**.—**ATH'ENS**, Thebes, **Lepan'to**, **Missolon'ghi**.
More'a or **Peloponne'sus**.—**Naup'lia**, **Ar'gos**, **Cor'inth**, **Patras**.
Cyc'lades, &c.—**Sy'ra**, **Hy'dra**; **Eg'ripo**, (in Eubœa.)
Ionian Is.—**Corfu**, **Zan'te**.

Largest Towns.—The towns are small, few having a pop. of 5,000; 3 have bet. 10,000 and 20,000, viz.:—**Hydra**, **Argos**, **Nauplia**; and 5 have above 20,000, viz.:—**Athens**, 41,000, **Corfu**, 25,000, **Zante**, 20,000, **Syra**, 20,000, and **Patras**, 20,000.

ATHENS, (5 m. from its sea-port, the **Piræus**), one of the most renowned cities of antiquity; for ages the seat of literature and science; has many remains of ancient architecture; has a univ. **Thebes** or **Thiva**, in anc. times a city of gt. wealth and importance, now a village of mean huts. **Missolonghi**, (*G. of Patras*), ch. town in the W. of Greece; here died Lord Byron, 1824. **Nauplia**, (*G. of Nauplia*), strongly fortified. **Argos**, a famous city of antiquity. **Corinth**, (*Isk. of Corinth*), in anc. times a gt. and wealthy commercial city, now a mere village. **Patras**, ch. seat of the foreign trade; exports currants. **Mistra**: near this the site of anc. Lacedæmon or Sparta, once a famous rep., now in ruins. **Syra**, ch. commercial city in Greece; principal station of the *Medit. steamers*. **Hydra** has an active trade. **Egripo**, b.-p. of Aristotle, the anc. philosopher. **Corfu**, strongly fortified; has a univ.

SCENES OF HISTORIC INTEREST.

Marathon, 10 m. N.E. of Athens.—**Miltiades** def. the Persians, B.C. 490.
Mt. Parnassus and **Mt. Helicon**.—fabled abodes of the Muses.
Delphi, famous for the Oracle of Apollo, now **Salona**, S. of Parnassus.
Pass of Thermopylæ, near **Zeitoun**, and bet. Mt. Ceta and the sea, **Leonidas** and 300 Spartans fell resisting the Persians under **Xerxes**, B.C. 489.
Navarino, (S.W. coast of Morea).—the Brit., French, and Russian fleets def. the Turks and Egyptians in 1827.

CLIMATE AND PRODUCTIONS.—The climate is generally warm and delightful. The sky is remarkably clear: little rain falls except in winter, and snow is seldom seen except on the mt. smts. The vegetation is rich, and varies with elevation. The mt. tops are covered with pine forests, and the plains and coasts abound with fruit-trees, including the vine, olive, orange, fig, &c. Our finest flowers flourish in a wild state. The ch. objects of culture are currants, olives, and grapes. Of domestic animals the ass occupies the place of the horse, the sheep and goat that of the cow, and bees are numerous. Of minerals, salt, sulphur, and marble are abundant, but only sparingly worked. The I. of **Paros** supplies the finest white marble. The ch. industry is maritime commerce, the Greeks being the greatest traders and mariners in the *Medit.*

PEOPLE.—The Modern Greeks or Hellenes are a mixed race, and speak the *Romaic* language—essentially the same as the anc. classic Greek. They are factious, discontented, and prone to deception, and have few of the characteristics of their great predecessors the ancient Greeks. Greece derives her chief interest from history as the ancient seat of art, science, literature, and freedom.

RUSSIA IN EUROPE.

General Aspect.—The Russian Empire is, next to the British, the most extensive in the world. Russia in Europe alone occupies the whole eastern portion of Europe, and is more than half its area. It is of oblong form, and, lying almost wholly within the Gt. Plain of Europe, its surface is remarkably level. In the N.W. of this plain rise the Valdai Hills, (1100 ft. high,) forming the watershed between the basins of the Baltic, Black, and Caspian Seas. In the N. are extensive frozen wastes, with numerous and large lakes in the N.W.; and in the S.E. are the Steppes, a desert, treeless region of 330,000 sq. m., covered with long coarse grass and sand, interspersed with numerous small salt lakes.

DIVISIONS AND TOWNS.

- I. Baltic Provs. and Gd. Dy. of Fin'land.—St. PE'TERSBURG, Cron'stadt; Rev'el, Ri'ga, Mittau'; Hel'singfors, A'bo.
- II. Gt. Russia or Muscovy.—Archang'el, Tver, Jaroslav', Nijni-Novgorod'; Smolensk', Tu'la, Mos'cow, Kalu'ga.
- III. Little Russia or The Ukraine.—Kiev', Polta'va, Kharkov'.
- IV. W. Russia and Russian Poland.—Vil'na, Minak, Moghilev', Jit'omir, Berditchev'; War'saw, Lub'lin.
- V. South or New Russia.—Kishenan', Odes'sa, Nikolai'ev, Kher'son; Sim'feropol, Sebas'topol; Taganrog'.
- VI. East Russia.—Kasan', Simbirsk', Pen'za; Perm, Astrakhan', Saratov'; O'renburg.
- VII. Caucasia.—Tif'lis, Er'ivan, Shemak'ha.

Largest Towns.—St. Petersburg, 539,000; Moscow, 351,000; Warsaw, 243,000; Odessa, 119,000; Riga, 102,000; sixty others have more than 20,000.

ST. PETERSBURG, founded in 1703 by Peter the Great; one of the most splendid caps. in the world; its site once a marsh, and still subject to inundations by the Neva. **Cronstadt**, on a small island, strong fortress, port of St. Petersburg, and ch. naval station. **Revel** and **Riga**, strongly fortified, with great exports of timber, corn, and hemp. **Helsingfors**, cap. of Finland, defended by the strong fortress of Sveaborg, styled the Gibraltar of the North. **Archangel**, once the only sea-port of Russia, closed by ice from Sept. to July. **Nijni-Novgorod** has a great annual fair from 1st July to 1st Sept., attended by traders from all parts of Europe and Asia. **Smolensk**, nearly ruined by the French in 1812. **Tula**, gt. seat of the iron mfr.—the 'Birmingham of Russia.' **Moscow**, cap. from 1296 to 1703; burned by the Russians during the French invasion in 1812; centre of gt. inland commerce; famous for its gt. bell (200 tons) and the citadel of the Kremlin. **Kaluga**, greatest mfrs. in Russia. **Kiev**, cap. from 900 to 1296; the Holy City of Russia. **Poltava**: Peter the Great def. Chas. XII. of Sweden in 1709. **Odessa**, greatest commercial city in the S. of Russia; gt. exports of wheat. **Nikolaiev**, ch. naval arsenal in the Black Sea since the destruction of Sebastopol. **Kherson**: John Howard, the philanthropist, died here in 1790. **Sebastopol**, taken in 1855 by the allied Brit. and French troops after a year's resistance. **Warsaw**, the old cap. of Poland; a ch. station of the Russian army; has more Jews than any other city of Europe. **Berditchev** has four gt. annual fairs. **Kasan**, gt. entrepôt of commerce bet. European and Asiatic Russia. **Perm**: extensive overland trade with China; mostly built of wood; has forges for the iron ore of the Urala. **Astrakhan**: ch. entrepôt of trade with Persia and India; has extensive fishery and mfrs. of cloth and leather.

CLIMATE.—From the great extent of Russia the climate is very

varied—from the rigours of the Arctic Zone to the mild luxuriance of the Crimea, where the vine, olive, and orange flourish. It is decidedly continental, and drier than that of Western Europe.

PRODUCTIONS.—Vegetation.—Immense natural forests, chiefly of coniferous trees, cover $\frac{2}{3}$ of the country. A squirrel may pass from St. Petersburg to Moscow, a distance of 450 m., without once touching the ground. Many of the towns are built of wood, and the streets and roads paved with it. The central provs. produce immense quantities of grain. Rye is the chief crop for home consumption; but hemp, flax, tobacco, and potatoes, are largely cultivated. The Urals are a rich storehouse of minerals, especially gold, platinum, copper, rock-salt, and precious stones. The ch. exports are timber, tar, tallow, leather, furs, corn, hemp, and flax.

PEOPLE.—Russia in Europe has ten distinct nationalities. The G. Ch. is the established religion; but the Poles are R. C.; Lutheran Prots. abound in the Baltic provs., and Jews in Poland, besides Mohammedans, Buddhists, and Pagans. The Russians are the worst educated people in Europe. The Czar or Emperor has absolute authority both in Church and State; the nobility are a highly privileged and powerful class; the peasantry, 22,000,000 in number, were formerly serfs, but are now in course of emancipation. The military force, about 1,000,000 men, is the largest in the world.

EXERCISES.—Name from the Map 5 fiords and 3 rivers in Norway, and 6 rivers in Sweden. Name the principal Is. of the 2 island-groups, and the 5 branches of the Rhine, in Holland. Point out and name 4 mt.-ranges in the interior of Germany, and 8 bet. Germany and Austria. Point out the 7 largest rivers of Germany and the tribs. of the Rhine and Danube. Name the Austrian Is., the 4 large rivers rising in Austria, and the 5 Austrian ranges of the Alps. Name the 4 Swiss ranges of the Alps. Name and describe the 4 principal rivers that drain Switzerland. Point out and name the mts. of France in the interior. Give the rivers of the 4 slopes of France. Name each of the mt.-ranges of Spain and Portugal. Point out and name 3 rivers besides the Po in Italy. Give 5 seas, 5 Is., 5 gulfs, 5 pens., 3 rivers in the basin of the Egean, 3 mts. in the E. of Thessaly, 3 secondary ranges of the Balkans, the 3 mouths of the Danube, all connected with Turkey. Give the ch. Is. of each group of the Is. of Greece. Point out 5 minor pens., 5 capes, and 7 gulfs connected with Greece. Which mts. rise from the Gt. Plain in Russia? Group the towns of Europe according to the coasts or rivers on which they are situated.

COUNTRIES OF ASIA.

(Revise "Asia," pp. 38-46.)

SIBERIA.

General Aspect.—Siberia, or Asiatic Russia, comprises an area about $\frac{1}{3}$ larger than all Europe, but its pop. is only $\frac{1}{3}$ more than that of Scotland. Its surface is a low-lying plain, watered by immense rivers, except in the S.E., which is mountainous. The Kirghiz Territory, recently acquired, consists of immense steppes.

DIVISIONS AND TOWNS.

Western Siberia.—**TOBOLSK'**, Omsk, Tomsk, Barnaul'.

Eastern Siberia.—**IRKUTSK'**, Kiakh'ta, Nertchinsk', Yakutsk'.

TOBOLSK, (*junction of Rs. Tobol and Irtysh*), built of wood; a gt. centre of commerce, with mnfs. of linen, leather, soap, and candles. **Tomsk**, centre of the Altai mining district. **IRKUTSK**, (near L. Baikal,) built of wood in a fine situation; has telegraphic communication with St. Petersburg. **Kiakh'ta**, gt. entrepôt of trade bet. Russia and China. **Nertchinsk**, in the midst of gold, silver, iron, lead, and tin mines; head-quarters of the penal settlement of E. Siberia. **Yakutsk**, (*R. Lena*), centre of the trade in furs and walrus-teeth. None of the towns have more than 20,000 of pop.

CLIMATE AND PRODUCTIONS, &c.—The climate is extremely severe. The vegetation is scanty, but the S. is covered with forests, interspersed with fertile valleys. Its dreary wastes abound with fur-bearing animals; and no country exceeds Siberia in the richness and variety of its mineral produce. The ch. industries are hunting, fishing, and mining; and the commerce consists of the interchange of these, by barter, for the tea, silk, porcelain, paper, and other manufactured goods of Europe and China. The merchandise is conveyed overland, chiefly by means of sledges drawn by dogs or rein-deer. About one-half the pop. consists of Russian exiles, composed of criminals and political and religious offenders, condemned to hard labour in the mines. The country belongs to Russia, and is governed by two governors-general.

TURKESTAN.

General Aspect.—Turkestan or Independent Tartary, as regards surface, forms part of the Gt. Northern Plain of the Old World. But it is mountainous in the S. and E., whence it slopes westwards to L. Aral. The W. belongs to the depressed region around the Caspian.

DIVISIONS AND TOWNS.

Bokhâra.—**BOKHA'RA**, Samarcand', Balkh.

Khi'va.—**Khi'va**.

Khokand'.—**Khokand'**, Khojend', Tashkend'.

Koondooz'.—**Koondooz'**, Khooloom', Budak'shan.

BOKHARA (160,000), a gt. seat of Mohammedan learning; extensive commerce. **Samarcand**, now insignificant, once a very large city, the cap. of the Empire of Tamerlane, the Tartar conqueror. **Balkh**, once cap. of the ancient Km. of Bactria; b.-p. of Zoroaster, the founder of the system of fire-worship. **Khi'va**, built of mud; a gt. slave-market. **Khokand** (100,000): mnfs. of silk and cotton. **Budak'shan**: valuable mines of ruby and lapis lazuli. **Khojend**, pop. 50,000.

CLIMATE AND PRODUCTIONS, &c.—The climate is subject to great extremes, and violent tornadoes are frequent. The country in general consists of dreary steppes, or barren sand. Vegetation is scanty, and tillage is confined to the valleys. Forests are awanting, but the fruits are of the greatest excellence. Wild animals are numerous. Camels, sheep, and goats, form the ch. wealth of the wandering tribes. The ch. mineral products are gold-dust,

salt, and precious stones. The commerce is considerable, and is carried on chiefly by caravans. Turkestan, or 'Land of the Turks,' was the original home of the Turks.

CHINESE EMPIRE.

The Chinese Empire comprises China Proper, Chinese Tartary, and Tibet. It is $\frac{1}{3}$ of Asia, $\frac{1}{2}$ larger than Europe, and $\frac{1}{10}$ of the whole land-surface of the globe, while its pop. comprises $\frac{2}{5}$ of the human race.

I.—CHINA PROPER.

General Aspect.—China Proper has an area of 1,700,000 sq. m. Its surface is mountainous in the N., a great alluvial plain in the Centre and E., and interspersed with mts. and valleys in the S.

TOWNS.

Six Eastern Provs.—PEKIN', Tien-tsin', Nankin', Hang-choo, Shanghai', Soo-choo, Foo-choo, Amoy', Canton'.

Six Central Provs.—Tai-yuen, Kai-fong, Wo-chang, Kin-te-ching, Nan-chang.

Six Western Provs.—Sin-gan, Ching-too, Quei-yang.

PEKIN, in a sandy plain, 60 m. S. of the Gt. Wall, consists of two parts—a Tartar city and a Chinese city—the latter the seat of trade, the former the residence of the Emperor and ch. dignitaries. **Tien-tsin**, the port of Pekin. **Nankin** (*Yang-tse-kiang*): silk, paper, and cotton mnf. (hence *nankeen* cloth): has a porcelain tower 9 storeys, or 200 ft. high. **Hang-choo**: gt. silk trade. **Shanghai**, **Ning-po**, **Foo-choo**, and **Amoy**, ports opened to Brit. trade by treaty of Nankin, 1842; 8 others opened by treaty of Tien-tsin, 1858. **Canton**, at the head of an estuary called the Bocca Tigris, ch. commercial city, with large exports of tea; long the only port open to Europeans; many of the inhabitants live constantly on the river in boats or floating houses. **Kai-fong**, ch. seat of the Jews in China. **Kin-te-ching** and **Nan-chang**, gt. centres of the porcelain mnf. **Quei-yang**: mines of gold, silver, vermillion, and iron.

Largest Towns.—Pekin, 2,000,000, Soo-choo, 1,500,000, Foo-choo, Kai-fong, Kin-te-ching, and Canton, each 1,000,000, Hang-choo, 700,000, Nankin, 500,000. The interior has many other very large and populous cities, but they are still little known to foreigners.

CLIMATE AND PRODUCTIONS, &c.—The climate is subject to extremes, and the average temperature is lower than in corresponding latitudes in Europe. The soil is productive, and every spot is diligently improved. There are no forests, and the ch. vegetable productions are rice in the low grounds, and tea in the hilly districts. Peculiar to China are the tallow-tree and the camphor-tree. Minerals are abundant, the most valuable being kaolin or porcelain clay. The ch. industries are agriculture and mnfs. of porcelain, silks, and nankeen stuffs; while the internal commerce is extensive, being carried on by the rivers and network of canals. The ch. exports are tea, silks, nankeens, porcelain, lacquered ware, and carved work; and the ch. imports are opium from India, manufactured goods from Britain, and furs from Siberia.

The people number 370,000,000, or $\frac{1}{3}$ of the whole pop. of the globe. The language is monosyllabic, and is very peculiar, each of its 80,000 words being denoted by its own particular character or symbol. The gov. is despotic, but seldom oppressive; there is no hereditary aristocracy; and any person possessed of a certain degree of learning may be appointed a mandarin, or public officer of rank. The religion of the common people is Buddhism; of the upper classes, Confucianism.

The Chinese are deceitful, and full of national vanity, calling their country the 'Celestial Empire;' but they excel in carving and other arts requiring patience and taste; and many inventions, such as printing, the mariners' compass, and gunpowder, are said to have been known in China long before they were known in Europe. The feet of women of the upper classes are confined, in childhood, so as to prevent their growth, which renders them lame for life; and the nails of the left hand of men of rank are allowed to grow so long that at night they are wrapped round their hand, to preserve them from breaking. Rice, the principal food, is eaten by means of chop-sticks, requiring much art to use; pork is the favourite meat, but dogs' flesh is considered a delicacy, and even rats and mice are much relished by the lower orders; tea is drunk cold, and without sugar or cream; and a favourite dish is edible birds' nests, from the E. Indies.

† The Great Wall of China, built in the 3rd century to repel the Tartars, is 1250 m. long, 15 ft. broad, and from 15 to 30 ft. high. The Grand Canal is 700 m. long.

II.—CHINESE TARTARY.

General Aspect.—Chinese Tartary occupies the greater part of the great Table-land of Central Asia, having in the centre the great rainless sandy Desert of Gobi or Shamo. Its area is estimated at 3,000,000 sq. m., or more than $\frac{3}{4}$ of Europe, and the pop. at 29,000,000, or less than that of the British Isles.

DIVISIONS AND TOWNS.

Core'a.—King-ki-tao.	[den.]	Chinese Turkestan', including
Manchoo'ria.—Kir'in-ou'la, Mouk'-		Dzounga'ria'--Yarkand', Kash-
Mongo'lia.—Our'ga, Maimat'chin.		gar'; Ili or Guld'ja.

Corea, tributary to China, is separated from it only by a wooden palisade; it has no intercourse with foreigners. Moukden, or Chinyang, the old cap. of the Manchoo dynasty that now rules China, and still the burying-place of its emperors. Maimat'chin, a frontier town, forming an entrepôt of the trade bet. China and Russia; inhabited only by males. Yarkand (150,000) and Kaahgar, gt. emporia of trade bet. China and Western Asia. Ili, pop. 40,000.

CLIMATE AND PRODUCTIONS, &c.—The climate over so wide a region is necessarily very varied, and the changes of temperature are great and sudden. Frost and snow are frequent, even in summer, and rain is rare except near the mts. The vegetation is scanty, but the N. of Mongolia is densely wooded, and Manchooria and Chinese Turkestan have many highly fertile tracts. In the latter division are many large towns engaged in commerce, but the rest of the vast region of Chinese Tartary is occupied by wandering Tartar tribes, whose camps, like moving cities, are constantly passing to and fro over its surface. Each tribe is ruled by its own Khan or chief, who pays an annual tribute to the Emperor of China.

III.—TIBET.

General Aspect.—Tibet is the loftiest table-land on the globe, and gives rise to most of the large rivers of Southern Asia. It is supposed to have an area of 693,000 sq. m. Pop., 6,000,000.

DIVISIONS AND TOWNS.

TIBET PROPER, consisting of—	Middle Tibet, or Ladak'h.—Leh.
Eastern Tibet.—LAS'SA. [boo.	Little Tibet or Bultistan.—Is-
Western Tibet.—Teshoo Lom-	kar'do.

Middle and Little Tibet, are tributary to Cashmere in India. **Lassa**, on a trib. of the Sanpoo, pop. 50,000, residence of the Grand Lama, the head of the Buddhist religion, has extensive commerce with neighbouring countries.

CLIMATE AND PRODUCTIONS, &c.—The climate is exceedingly dry, and in winter intensely cold. Vegetation is scanty, and the cedar and birch are the only trees found in the mts. Minerals are abundant, but are little wrought, for want of fuel. The animals peculiar to Tibet are the yak, the beast of burden, and the Tibet goat, which supplies the fine hair for making Cashmere shawls. Tibet is the head-quarters of the Buddhist religion, and abounds with temples, 80,000 lamas or priests being supported by the gov. The transit trade is extensive.

JAPAN.

General Aspect.—Japan consists of an extensive archipelago, of 3,850 islands and islets, traversed throughout its main length by a chain of lofty mts., with many active volcanoes. It consists of three groups, viz.:—1. Japan Proper, with four large islands; 2. The Loo Choo Is., to the S.; and 3. The Kurile Is., to the N. The S. part of Corea and of the I. of Saghalien, are tributary to Japan.

TOWNS.

Niphon'.—YED'DO, Yokohama,	Yes'so.—Matsmai', Hakodadi.
Mia'ko, Osaka.	Sikok'f.—To'sa, A'wa.
Kiu-siu.—Nagasaki, Kagosi'ma.	

YEDDO, one of the finest and largest cities in the world; residence of the Tycoon or secular sovereign. **Miako**, residence of the Mikado or spiritual sovereign; ch. seat of learning and mnfs. **Nagasaki**, the ch. sea-port and emporium of trade; till 1854 was the only port open to foreigners.

CLIMATE AND PRODUCTIONS, &c.—The climate is in general mild and healthy, but hurricanes and earthquakes are frequent. The soil is in many places sterile, but it is carefully cultivated—agriculture being compulsory. The ch. vegetable products are cotton, silk, rice, tea, sugar-cane, and tobacco. Rice and fish are the ch. articles of food, and tea the ch. beverage. Of domestic animals, the buffalo and ox are used as beasts of burden, while the horse is only used for riding. The fox receives divine honours. The precious minerals, copper, coal, and kaolin, are

very plentiful. The ch. industries are agriculture and mnfs. of silk, cotton, porcelain, lacquered and japanned wares, paper, metallic goods, &c. Japan resembles China in the density of its pop. and the character of its inhabitants. The gov. is vested in two sovereigns or emperors,—a spiritual or ecclesiastical, styled the *Mikado* or *Dairi*, ruling in religion and education; and a temporal, styled the *Tycoon* or *Siogun*, ruling in civil and military affairs, and virtually the emperor, although nominally subject to the Mikado.

TURKEY IN ASIA.

General Aspect.—Asiatic Turkey has lofty mts. in the N. and W., with high table-lands in the interior; stony and sandy plains in the S., with alluvial tracts on the lower course of the Euphrates and Tigris. The islands are Lesbos, Scio, Samos, Patmos, Rhodes; Cyprus.

DIVISIONS AND TOWNS.

A'sia Mi'nor.—SMYR'NA, Bru'sa, Scu'tari, Sin'ope', Kuta'ya, Afium'-Karahis'sar, Aid'in, Kaisari'eh, Ango'ra, Si'vas.

Arme'nia.—Erzeroum', Kara, Trebizond'.

Kurdistan'.—Van, Bet'lis, Diar'bekir.

Syria, including Palestine.—Alepp'o, Anta'ki, Trip'oli, Beyrout', A'cre, Jeru'salem, Damas'cus.

Mesopota'mia.—Bagdad', Bas'sorah, Hil'lah, Mosul', Or'fah.

Patmos, scene of the Apostle John's exile. **Rhodes**: in anc. times famous for arts and literature, and a gigantic brazen statue, styled the *Colossus*, one of the Seven Wonders of the World. **Mesopotamia**, so named from its position bet. the rivers Euphrates and Tigris, is the anc. Padanaram; its modern name, *Algeria*, means 'the island.' **Irak-Arabi**, on the lower course of these rivers, is the anc. Chaldaea or Babylonia.

SMYR'NA, (150,000,) an anc. city, and one of the largest and richest in Turkey; gt. exports of dried fruits. **Brusa**, at the foot of Mt. Olympus, a flourishing commercial town, destroyed by an earthquake in 1855. **Scutari**, on the Bosphorus, opposite Constantinople, of which it is a suburb. **Sinope**, the best sea-port on the N. coast; here the Turkish Fleet was destroyed by the Russians in 1853. **Afium-Kara-Hissar**, centre of the opium trade. **Aidin** or **Ghuzel-Hissar**, ranks second to Smyrna for trade and commerce. **Angora**: stuffs of fine goats' hair. **Aleppo** or **Haleb** (100,000): silk and cotton mnfs.: inland commerce; fine city, with productive gardens. **Antaki**, the anc. Antioch: here the followers of Christ were first named Christians. **Beyrout**, an important sea-port for Damascus. **Acre**, famous for sieges; bombarded by the Brit. in 1840. **Jerusalem**, (20,000,) the most interesting and celebrated city in the world; the scene of the ch. events of sacred history. **Damascus**, (150,000,) in a beautiful plain on the eastern base of the Anti-Libanus, one of the oldest cities in the world; mnfs. of gold and silver ornaments and woven stuffs, and gt. centre of caravan trade. **Scor** and **Saida**, small vills. on the Levant, S. from Beyrout, the sites of the anc. cities of Tyre and Sidon, renowned for their commerce and riches. **Palmyra** or **Tadmor**, a ruined city in the Syrian Desert; westwards are the ruins of **Baalbec**, or City of the Sun, once of gt. size and magnificence. **Bagdad**, (65,000,) on the Tigris, long the gt. emporium of trade with neighbouring countries, but now much decayed. **Bas'sorah** or **Bassa**, on the Shat el-Arab, the gt. emporium of the Turkish empire for eastern produce. **Hillah**, on the Euphrates, a vill. amid the ruins of anc. Babylon. **Mosul**, on the Tigris, near the ruins of anc. Nineveh; gives name to *muslin*, once made there. **Or'fah**, the anc. Ur of the Chaldees, the b.-p. of Abraham.

CLIMATE AND PRODUCTIONS, &c.—The climate is varied; the highest mt.-smts. are snow-clad, while their flanks are covered with the vegetation of cold and temperate latitudes, and the temperature of the valleys is almost tropical. Dates flourish in Mesopotamia, and form an important article of human food. The mts. contain all the useful metals. The exports are cotton and silk, opium, rhubarb, dried fruits, shawls, carpets, leather, &c. The internal commerce is conducted by caravans. The people include Turks, (the most numerous class,) Arabs, Greeks, Armenians, (who profess a corrupt Christianity,) Kurds, &c. The gov. is the same as in Turkey in Europe.

ARABIA.

General Aspect.—The surface consists of an immense plateau skirted along the W. and S. coasts by mt. chains, whose greatest heights are Horeb and Sinai, in the pen. of Sinai. The coasts are low, and where the water is abundant, fertile; but the interior consists, in most parts, of immense wastes of shifting sands. There are no rivers, except in the rainy season.

DIVISIONS AND TOWNS.

Arabia Petraea.—Ruins of Pe'tra.	O'man.—Muscat'.
Hed'jas.—MECCA, Medi'na.	Lah'sa.—No towns.
Yemen.—Sa'na, Mo'cha, A'den.	Ned'jed.—Dera'eh.
Hadramaut'.—No towns.	

Arabia Petraea, ('Stony Arabia,' or 'Arabia with Petra as its cap.')

name of the N.W.; **Arabia Felix**, ('Araby the Blest,') that of the W. and S.; **Arabia Deserta**, ('Desert Arabia,') that of the centre and E. Modern names:—**Bahr-el-Tour-Sinai**, ('Desert of Mt. Sinai,') the scene of the 40 years' wanderings of the children of Israel; **Hed'jas**, the 'Holy Land' of Mohammedans generally, as the place of pilgrimage to **MECCA**, the 'Holy City,' the b.-p. of Mohammed, and **Medina**, which contains his tomb. **Yemen**, means 'the south;' **Nedjed**, 'the highland.'

Petra, the anc. cap. of Idumea, once a gt. and important seat of commerce, hewn out of the solid rock; hence the name, ('Rock' or 'Stone.') **Jiddah** is the port of Mecca. **Mocha**, the port of Sana, famous for exports of fine coffee. **Aden**, a strongly fortified sea-port, (British.) **Muscat**, cap. of the Imaum of Muscat, the most powerful of the Arab princes; a gt. emporium of commerce.

CLIMATE AND PRODUCTIONS, &c.—The climate is one of the driest in the world. The heat in the plains is excessive, but temperate in the high lands. The simoom, or samiel, blows from the interior to the coasts. The vegetable products are the date, palm, coffee, cotton, spices, vine, fig, &c. The more famous animals are the horse and camel, which form the chief wealth of the Arabs. All kinds of industry are unimportant, but large quantities of merchandise are brought in by caravans and by sea. The people are of two classes—those settled in towns, and the Bedouins, the reputed descendants of Ishmael, wandering with their flocks and herds, dwelling in tents, and subsisting partly by plunder. The gov. of the Bedouins is patriarchal, each tribe being governed by a petty chief stvled a *Sheikh* or *Emir*. The

Desert of Sinai is subject to Egypt; the Hedjas to Turkey; and Yemen and Muscat to rulers styled *Imams*. The centre is occupied by the Wahabees, a sect of Mohammedans.

PERSIA.

General Aspect.—The centre is a great table-land, part of the Gt. Western Plateau, bounded by lofty mts. on the N., W., and S. In the W. are many irrigated and fertile districts, but the E. is an irreclaimable salt and sandy desert. The rivers are insignificant.

TOWNS.

In the N.—Balfrush', Reshd,	In the Centre.—Teheran', Ispa-
Tabriz'.	han', Yezd.
In the W.—Urumi'ah, Hamadan'.	In the E.—Ker'man, Me'shed.
In the S.—Bushire', Lar, Shiraz'.	

Balfrush, ch. sea-port on the Caspian; numerous bazaars and caravanserais. **Tabriz**, gt. entrepôt of trade with adjoining countries. **Hamadan**, the anc. Ecbatana, the cap. of Media; contains the supposed tombs of Esther and Mordecai. **Bushire**, (*Busheer'*), ch. sea-port of Persia. **Lar** has the finest bazaar in Persia. **Shiraz**, once the cap. of Persia; b.-p. of the poets Saadi and Hafiz; famous for wines and ottar of roses; 80 m. N.E. are the splendid ruins of Persepolis, the anc. cap. of Persia. **TEHERAN**: splendid buildings and gardens, intermingled with mud-built huts; deserted in summer by the upper classes on account of the intense heat. **Ispahan**, the former cap.; now much decayed, but still the largest city; gt. trade and mnfs. **Yezd**, in the Persian Desert; large bazaars and mnfs.; has many Parsees or Guebres, (fire-worshippers.) **Meshed**, in a fertile plain; active caravan trade; its mosque the richest in the world—the doors being studded with rubies and covered with gold.

Largest Towns.—Ispahan, 180,000, Teheran, 120,000, Meshed, 100,000, Tabriz, 80,000, Balfrush, 60,000, Yezd, 50,000.

CLIMATE AND PRODUCTIONS, &c.—The climate presents the greatest extremes. Trees are rare except in the fertile region of the Caspian, which is covered with forests, fine pastures, orchards, and vineyards. Dates are a ch. article of food, the melons are the finest in the world, and the rose is largely cultivated. Other vegetable products are rice, wheat, wines, silk, cotton, tobacco, rose-water, opium, assa-fœtida, and other drugs. The ch. mnfs. are silk and cotton stuffs, goats' hair shawls, carpets, swords, and porcelain. Roads are entirely wanting, but the commerce is extensive by means of caravans. The people consist of the settled inhabitants and the wandering tribes, including Turks, Kurds, Arabs, &c. The Persians are a handsome, intelligent, and warlike people. The sovereign is styled the *Shah*, and his subjects are regarded as his slaves.

AFGHANISTAN AND BELOOCHISTAN.

General Aspect.—Afghanistan and Beloochistan form the eastern half of the Plateau of Iran or Gt. Western Plateau. The surface, except along the coast, is generally rugged, barren, and destitute of wood.

DIVISIONS AND TOWNS.

Cabool'.—CABOOL', Jellalabad', Candahar'.—Candahar'.
 Ghuznee'.
Kelat'.—KELAT, Gundâva.
Herat'.—Herat'.

CABOOL (60,000): extensive transit trade; noted for the excellence of its fruits; scene of the outbreak of the Afghan rebellion in 1841-2, when the Brit. troops were massacred in their retreat to India through the **Khyber Pass**. **Jellalabad**, famous for its heroic defence under Sir R. Sale, 1841-2. **Herat**, (45,000,) a station of gt. military and commercial importance. **Candahar**, (100,000,) 9,000 ft. above the sea; a strong fortress; extensive transit trade bet. India and Persia. **KELAT**, strong fortress, surrounded by mts.; N.E. is the **Bolan Pass**, the main route from India to the W.

CLIMATE AND PRODUCTIONS, &c.—The climate is subject to intense extremes. The vegetation of the lowlands resembles that of India, consisting of rice, cotton, sugar-cane, millet, maize, and turmeric; that of the uplands is European in character. Of the animals, sheep and goats are abundant, yielding a fine wool; one breed of sheep being remarkable for the tail, which is a mass of fat from 10 to 12 lbs. in weight. Arts and husbandry are in a low condition. Of the people, the Afghans are true Highlanders—rude, warlike, and predatory, but distinguished for hospitality. The Beloochees in the W., and the Brahoutees in the E., of Beloochistan, are nomadic tribes.

INDIA OR HINDOSTAN.

General Aspect.—India is the central pen. of Southern Asia, and is of triangular form. The highest mts. in the world, situated on its northern boundary, are separated from the table-land of Southern India by the great river-plains of the Indus and the Ganges. The rivers are of two systems, viz.:—The Himalayan and the Hindostanee—the former fed chiefly by the snows of the Himalayas, and the latter by annual rains in the Western Mts.

DIVISIONS AND TOWNS.

I.—BRITISH INDIA.

PRESIDENCY OF BENGAL, comprising—

- (1.) **Lower Provs.**—CALCUTTA, Serampore', Moorshedabad', Pat'na; Dac'ca, Purneah, Ga'ya, Juggernaut'.
- (2.) **N.W. Provs.** and **Oude.**—Benâ'res, Mirzapore', Allahabad', Cawnpore', Furruckabad', Fyzabad', Lucknow', Agra, Meerut', Bareilly, Hurdwar'.
- (3.) **Punjaub and Seik States.**—Lahore', Amrit'zir, Moultan', Peshaw'ur, Del'hi, Sim'la.
- (4.) **Central Provs.**—Nagpore', Saugor', Jubbulpore', Sumbulpore'.

BOMBAY PRESIDENCY.—Bombay', Poo'nah, Surat', Ahmedabad'; Hyderabad', Kurrâchee, Shikarpore'.

MADRAS PRESIDENCY.—Madras', Tanjore', Trichinop'oly, Ar'cot, Vellore', Coch'in', Calicut'.

Ceylon.—Colom'bo, Point de Gal'le, Trin'comalee', Kan'dy.

CALCUTTA, (on the R. Hooghly, a branch of the Ganges, 100 m. from its mouth,) the finest city and greatest commercial emporium in Asia; Brit. town, fine palaces; native town, mud and bamboo huts. **Fatna**, (*Ganges*), gt. trade in rice, opium, saltpetre, indigo, and sugar; gt. military depôt. **Gaya**, a sacred city of the Hindoos, visited annually by 100,000 pilgrims. **Juggernaut**, or **Pooree**, (*B. of Bengal*), a famous seat of Hindoo worship. **Benares**, (*Ganges*),



HINDOO TEMPLE WITH LEANING TOWER AT BENARES.

one of the most sacred cities of the Hindoos; has many wealthy native bankers and dealers in diamonds. **Mirzapore**, a gt. cotton mart. **Allahabad**, cap. of the N.W. provs., and gt. military depôt; a sacred city of the Hindoos. **Cawnpore**, a military station, and gt. commercial city; memorable for the massacre of British men, women, and children by the Sepoys, under Nana Sahib, in 1857. **Lucknow**, (*R. Goomtee*), cap. of Oude; partly splendid, partly mud huts; memorable for its defence and relief in the Indian Mutiny, 1857-8. **Agra**, (*R. Jumna*), early Mogul cap.; the tomb called *Tajmahal* is the most sumptuous building in India. **Meerut**, scene of the outbreak of the Indian Mutiny in 1857. **Hurdwar**, (*Ganges*), has the largest annual fair in India. **Lahore**, (*R. Ravee*), once a residence of the Mogul emperor; taken from the Sikhs in 1849; in the fort are preserved the hair, sandals, and staff of Mohammed. **Amritsar**, sacred city of the Sikhs; the most commercial and wealthy place in Northern India. **Moulton**, strong fortress, taken by the Brit. in 1849. **Delhi**, (*R. Jumna*), a magnificent city, long the cap. of the Mogul empire; scene of gt. atrocities by the mutinous Sepoys in 1857. **Simla**, (*E. of R. Sutlej*), 7300 ft. above the sea; cool and healthful; gt. resort of invalids.

Bombay, on a small I., connected with the mainland by an artificial causeway; best docks in India; second to Calcutta for trade. **Surat**, (*R. Taptee*), first trading station of the E. India Company, founded in 1612; has a Hindoo hospital for sick animals. **Ahmedabad**, head-quarters of the Bombay army. **Hyderabad**, cap. of Scindh; **Kurrachee**, its ch. sea-port; **Shikarpore**, its largest town, (30,000,) with gt. transit trade through the Bolan Pass.

Madras, a handsome city, but has no harbour, vessels lying in the roads 2 m. off. **Tanjore**: its pagoda one of the finest in India. **Calicut**, gives name to *calico*: first port reached by Vasco de Gama on his first voyage round the C. of Good Hope. **Point de Galle**, a place of call for steamers bet. Europe and the East. **Trincomalee** has one of the finest harbours in the world.

II.—PRINCIPAL PROTECTED STATES.

Rajpoota'na.—Jhodpore', Bhurt-	Bundelcund'.—Jhan'si.
pore', Jypore', Bicaner'.	Nizam's Dominions.—Hydera-
Guzerat'.—Baro'da.	bad', Golcon'da, Aurungabad'.
Gwa'lior, (Scindia.)—Gwa'lior,	Mysore'.—Mysore', Sering'apa-
Oojein'. [Bhopal'.	tam', Bangalore.
Indore', (Holkar.)—Indore',	

Jhodpore has an immense citadel. Bhurtpore: gt. trade in salt, procured from a neighbouring lake. Jypore, the largest and most elegant of the native-built cities of India. Gwa'lior, one of the strongest fortresses in the world. Oojein, one of the seven sacred cities of the Hindoos. Hyderabad, a large, beautiful, and populous city. Golconda, famous for fine diamonds. Aurungabad, once the favourite residence of Aurungzebe, the last Mogul emperor; near it the magnificent cave-temples of Ellora; 50 m. N.E. is Assaye, where the Duke of Wellington gained his first victory, 1803. Seringapatam, taken by the Brit. in 1799, when Tippoo Saib was slain.

III.—INDEPENDENT STATES.

Bootan'.—Tassiu'don.	Cashmere'.—Cashmere' or Sir-
Nepan'.—Khatmandoo'.	inag'ur.

IV.—POSSESSIONS OF FOREIGN POWERS.

French.—Pondicher'ry and Kari-	Portuguese.—Pan'jim and Go'a,
kal', on the Coromandel coast;	on the Concan' coast.
Chandernagore', on the Hooghly.	

Khatmandoo has many Buddhist temples. Sirinagur, or Cashmere, (also Kashmir), long famous for shawls from the fine hair of the Cashmere goat. Pondicherry, built like a European town, with wide and regular streets. Goa, former cap. of the Portuguese settlements in India; now greatly decayed.

Largest Cities.—Calcutta, 600,000, Bombay, 600,000, Madras, 450,000, Jypore, 400,000, Lucknow, 300,000, Patna, 200,000, Benares, 150,000, and Delhi, 150,000; 13 bet. 100,000 and 150,000; 20 bet. 50,000 and 100,000.

CLIMATE.—The climate is extremely varied. In the plains the heat is intense, and European labour is impossible; but the mountainous regions are healthy. The S.W. monsoon blows from Mar. to Oct., bringing rain to the W. coast; the N.E. monsoon from Oct. to Mar., bringing rain to the E. coast. The centre is dry, and the lower basin of the Indus almost rainless.

PRODUCTIONS.—The soil is of remarkable fertility, but its productiveness varies with the supplies of moisture. The vegetation is largely tropical, and much of the country is covered with dense jungle. The principal trees are the teak, cocoa-nut, bamboo, banyan, tamarind, mango, and various palms; and the ch. vegetable products are rice, wheat, millet, cotton, sugar, indigo, opium, hemp, flax, tea, and timber. The minerals are iron, copper, coal, silver, gold, and precious stones. All the higher forms of animal life are abundant.

PEOPLE.—About $\frac{6}{7}$ of the pop. are Hindoos, the rest being chiefly Arabs and Persians, with Afghans, (who are Mohammedans,) in the N.W. Provinces.

The British number only about 80,000. The Aborigines of India are a degraded race, and are known by the general name of *Coolies*.

About 80 languages prevail over India—Hindee and Bengalee being the most important in the N., Tamil and Telugu in the S., while Hindostanee is the common medium of intercourse. Sanscrit was the anc. sacred language of the Brahmins.

The Hindoos are distinguished from all other nations by the minute and singular subdivisions which prevail among them, both with regard to their religion and their social state. Every particular trade constitutes a distinct and separate caste, of which 300 may be found in one community; and these castes can neither intermarry nor even eat, drink, or dwell together. Their forms of superstition are still more multifarious, and their divinities are almost innumerable, the chief being Brahma, 'the Creator,' Vishnu, 'the Preserver,' and Siva, 'the Destroyer.' 'Suttee,' or the self-immolation of widows on the funeral pile of their husbands, and infanticide, once common, are now nearly suppressed.

The ch. industries are agriculture and the mnf. of cotton and silk—especially muslins, calicoes, and shawls. The commerce is chiefly conducted by the Brit. The roads are bad; but there are very extensive canals and railways constructed by the gov.

In 1858 the sovereignty of British India was vested in the Brit. crown, and the gov. is in the hands of a Governor-General, assisted by a Supreme Council, executive and legislative, subject to the approval of the home gov. The Protected and Independent States are under the gov. of native rulers, whose rule is despotic, and often oppressive. To the Protected States Britain guarantees external defence and internal tranquillity.

India is not a colony, like most of our foreign possessions, the climate being unsuitable for settlement and colonization by the people of this country. Four-sevenths of the whole area, and three-fourths of the pop., are subject to Britain.

FURTHER INDIA.

General Aspect.—Further India, or India beyond the Ganges, also called the Indo-Chinese States, consists of a series of mt.-chains running N. and S., separating long narrow valleys watered by as many large rivers.

DIVISIONS AND TOWNS.

Burmah.—Man'delay, A'va, Amarapura, Bha'mo.

Siam.—Bankok', Yu'thia.

La'os.—Lanchang', Changmai'.

Anam.—Hue', Ke'sho.

Mala'ya.—Perak', (a small vill.)

BRITISH PROVINCES, viz.:—

1. Brit. Burmah.—Arracan',

Rangoon', Promé, Pegú', Moulmein'.

2. Straits' Settlements.—

George'town, Malac'ca, Singapore'.

Cambo'dia.—Pnomb Pinh, Udong'.

Lower Cochín' China.—Saigon'.

Man'delay, present cap. of Burmah; former caps.,—Ava, Amarapura, and Monchebo, on the Irrawady, the first two reduced to ruins by an earthquake in 1839. **Bhamo**, entrepôt of trade with China. **Bankok** (300,000): gt. seat of commerce; many of the inhabitants live on bamboo rafts floating on the R. **Meinam**. **Hue'**, (100,000,) strongly fortified in the European style by French engineers. **Arracan**, extremely unhealthy. **Rangoon**: gt. trade. **Pegu**: most productive naphtha wells. **Moulmein**, ch. town and sea-port in Tenasserim. **Singapore**, (I. of Singapore,) gt. emporium of commerce for the E. Indies. **Sai-gon**, (180,000,) fortified in the European style; naval arsenal and docks.

CLIMATE, PRODUCTIONS, &c.—The climate and natural productions are much the same as in India; but the climate is moister and more salubrious to Europeans. The industries are

limited; but commerce is extensive in Siam; and the govs. are excessively despotic.

Among the vegetable products are the gamboge, the gum of a tree in Cambodia, (hence the name,) gutta percha, the dried juice of the caoutchouc tree, dye woods, medicines, and perfumes. White elephants are found in Siam, and greatly prized, one of the titles of the king being 'Lord of the White Elephants.' The metals, precious stones, and petroleum, are very plentiful.

The Burmese excel in gilding and bell-casting—the pagodas, idols, barges, and principal buildings being highly decorated. Ship-building is carried on largely in Cochin China; and the Malays are excellent sailors, but notorious pirates. The subjects of the King of Siam and the Emperor of Burmah are forbidden, under pain of death, even to mention their sovereigns' names.

EXERCISES.—Compare the two largest cities of Asia with London. Write an account of the peculiar customs of the Chinese. Describe in writing some of the Hindoo customs. Name the tribes of the Ganges and Indus, and the rivers of the Hindostanee river-system. Give the mt.-chains and intermediate rivers of Further India. Find the difference in time bet. Pekin and Kashgar, and bet. Pekin and London. Group the towns of Asia according to the coast or river-basin on which they are situated. Classify the towns according to their leading characteristics. Give the approximate sailing and direct distances from London to Bombay, Calcutta, Singapore, Canton, and Nagasaki. Draw a map of each of the countries of Asia.

COUNTRIES OF AFRICA.

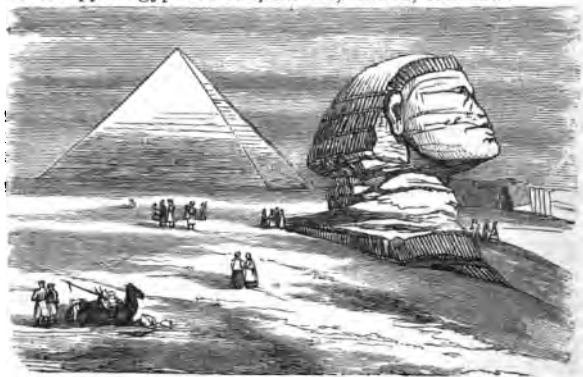
(Revise "Africa," pp. 47-53.)

EGYPT.

General Aspect.—Egypt consists of the long narrow valley of the Lower Nile, from 5 to 25 m. in breadth, enclosed by a double range of hills, generally low, which defend the valley from the sands of the desert beyond.

DIVISIONS AND TOWNS.

Bahá'ri or Lower Egypt.—CAIRO, Alexan'dria, Roset'ta, Damiet'ta, Vostá'ni or Central Egypt.—Ghi'zeh, Be'ni-Souef. [Suez'.
Said or Upper Egypt.—Siout', Thebes, Es'neh, Assouan'.



SPHINX AND THE PYRAMIDS.

CAIRO, or **GRAND CAIRO**, (*Nile*.) pop. 250,000, the largest city in Africa; ch. entrepôt of Egyptian commerce; divided into distinct quarters, according to the race and religion of the inhabitants; many splendid buildings, mosques, and minarets; streets narrow, dwellings mean, and built of sun-dried brick. **Alexandria**, pop. 150,000, founded by Alexander the Great, and named after him; once cap. of the East, and second city in the Roman Empire; ch. sea-port and emporium of commerce with Europe; important station on the Overland Route. **Rosetta**: here was found the sculptured stone containing the key to the hieroglyphics of Egypt. **Suez**, at the terminus of the Railway from Alexandria and Cairo, and of the Gt. Ship Canal from Port Said. **Ghizeh**, 8 m. above Cairo, where are the three largest Pyramids. **Thebes**, destroyed 28 B.C., has stupendous ruins, the most noted being the magnificent temples of Karnac and Luxor; others are found at **Edfu**, **Denderah**, &c., in Upper Egypt.

CLIMATE, PRODUCTIONS, &c.—The climate is exceedingly dry, equable, and healthy, and rain is almost unknown. At the Spring Equinox, the *Simoom* or *Khamsin* blows for 50 days; and the *mirage*, an optical illusion, occurs in the plains. The fertility of Egypt, which has always been celebrated, is confined to the Nile Valley, especially the Delta, fertilized by the annual inundations of the river; but canals of irrigation are extensively used for the higher grounds. The ch. vegetable products are the grains, (durrah, millet, maize, wheat, and rice,) cotton, lint, hemp, indigo, sugar, tobacco, opium,—durrah and dates, along with beans, forming the ch. food of the people. Besides the Aborigines, who are the *fellahs*, or cultivators of the soil, the people consist of Turks, Bedouins, Jews, and Europeans. The ch. industries are agriculture, commerce, and mnfs. of woollen cloths, pottery, and carpets—the mnfs. and commerce being monopolies of the gov. The commerce with the interior is conducted by caravans. Egypt, which was one of the earliest civilized countries, is now subject to Turkey, and the gov. is conducted by a viceroy or Pacha, styled the Khedive.

NUBIA.

General Aspect.—Nubia is traversed by the Nile, which here makes a sweep called the Great Bend; but the valley is so narrow as to permit of no cultivation on its banks. E. of Lower Nubia is a desert of sand and rocks.

DIVISIONS AND TOWNS.

Upper Nubia.—**KHARTOUM'**, Sennaar', Shen'di, Ber'ber.

Lower Nubia.—**Derr**, Ipsambul', New Dongo'la, Sua'kin.

Kordofan'.—**El-Obe'id**.

KHARTOUM, at the confluence of the White and the Blue Nile, residence of the Egyptian governor. **Shendi**, a caravan station. **Derr**: mud huts, amid groves of date-palms. **Ipsambul**: two remarkable rock-cut temples. **El-Obeid**, on an oasis, with gt. exports of gold, ivory, slaves, &c.

CLIMATE, PRODUCTIONS, &c.—The climate is extremely hot and dry, but healthy. The natural products are nearly the same as in Egypt—the region of Sennaar being the most productive. The commerce consists of an extensive transit trade bet. Egypt and the interior of Africa. The people are rude, and without arts, and under the dominion of Egypt.

ABYSSINIA.

General Aspect.—Abyssinia is highly mountainous, with vast table-lands intersected by valleys, rising in three distinct terraces from the Red Sea, and sloping towards the N.W.

STATES AND TOWNS.

Tigre'.—Antalo, Ax'um, Adow'a, | Amha'ra.—GON'DAR, Magdala.
Massow'ah. | Sho'a.—Anko'bar.

Antalo, near the R. Atbara, consists of 1,000 mean huts. **Axum**, the anc. cap. **GONDAR**, 30 m. N.E. of L. Dembea, now greatly reduced. **Massowah**, on a barren rock in the Red Sea, ch. sea-port; centre of the hottest region in the world; belongs to Egypt. **Magdala**, on the Flat of Talanta, taken by the Brit. troops under Sir Robert Napier in 1868, when King Theodore was slain and the captives rescued. **Anko'bar**, 8,200 ft. above the sea.

CLIMATE, PRODUCTIONS, &c.—The climate varies from the burning heat of the sea-coast and valleys to the pure and bracing air of the table-lands, and the severe cold of the mts. The soil is fertile, in many places producing three crops in the year. Vegetation increases with elevation: excellent pastures on the table-lands, and cedar forests on the mt.-tops. The coffee and cotton plants grow wild in the W., and senna, myrrh, and other medicinal plants abound. To the E. of Tigre' is an extensive plain, covered with salt two feet thick. The people are rude and barbarous. The ch. industry is agriculture; and there are mnfs. of leather, parchment, cotton cloth, tapestry, and iron and brass implements. Abyssinia, formerly under the gov. of an Emperor, is now split into a number of petty states.

THE BARBARY STATES.

General Aspect.—Barbary is traversed throughout by the Atlas Mts., which increase in elevation from E. to W. Most of the streams are winter torrents, while those on the S. terminate in small salt lakes, called *sebkahs*, or lose themselves in the sands of the Desert.

STATES AND TOWNS.

Moroc'co.—MOROCCO, Mogadore', Fez, Mequinez, Tangier'.

Alge'ria.—ALGIERS', Con'stantine, Bo'na, O'ran.

Tu'nis.—TU'NIS, Ca'bes, Kairwan'.

Tripoli.—TRIPOLI, Bengha'zi, Mourzouk', Gad'ames.

MOROCCO, in the centre of a fertile plain, walled, spacious, but ill-built and filthy. **Mogadore**, ch. sea-port. **Fez**, (40,000,) a fine town, the holy city of Morocco, with 300 mosques; ch. seat of mnf. of morocco leather. **Mequinez**, (70,000,) a handsome town, with a large imperial palace. **Tangier**, strongly fortified; once belonged to Britain. **ALGIERS**, (58,000,) built in the form of an amphitheatre, strongly fortified, and in appearance like a European town. **Con'stantine**: mnfs. of saddlery and other leather goods. **TUNIS** (200,000): of the cities of Africa, next to Cairo for pop., and to Alexandria for commerce; 3 m. N.E. are the ruins of anc. Carthage. **Kairwan**, (50,000,) in a sandy plain, a holy city of the Mohammedans, with the finest mosque in Africa. **TRIPOLI**: gt. caravan trade with the interior. **Mourzouk** and **Gadames**, gt. caravan stations; **Mourzouk**, on an oasis, the last station for water and provisions on the route to Bornou in Soudan.

CLIMATE, PRODUCTIONS, &c.—The climate on the N. is temperate, but S. of the Atlas range is intensely hot. Rain is rare in summer. The soil is remarkably fertile, but agriculture is sadly neglected, and famines are frequent. The vegetable products along the Medit. plain are wheat, maize, barley, cotton, indigo, tobacco, and the sugar-cane; and the mt. slopes are clothed with dense forests, especially with date-palms on the S. The people were till recently notorious pirates. The govs. are despotic, except in Algeria, which is a French colony.

Morocco is governed by an Emperor or Sultan; Algeria by a Regent, formerly, when independent, by a Dey; Tunis and Tripoli, (including Barca and Fezzan,) dominions of Turkey, each by a Bey or Pacha.

WESTERN AFRICA.

General Aspect.—The surface along the coast is low, flat, and in many places marshy, and this plain extends, on an average, 80 m. inland, bounded by mt. chains running parallel with the coast.

DIVISIONS AND TOWNS.

Senegambia.—Fort St. Louis, Goree'; Bathurst; Bissa'o.
Upper Guinea.—Free'town, Monro'via, C. Coast Castle, Elmi'na, Coomas'sie, Abo'mey, Abbeoku'ta; Benin', Bon'ny.
Lower Guinea.—Loan'go, San Salvador', St. Paul de Loan'da.

SUB-DIVISIONS.

SENEGAMBIA	{	—Native Tribes:—Fou'lahs, Ya'loffs, Mandin'goes.
		—Foreign Settlements:—Senegal' (Fr.), Gam'bla (Brit.) Bissa'o (Portuguese.)
UPPER GUINEA	{	—Native States:—Libe'ria, Ashantee', Daho'mey, Yoruba, Benin', Old Calabar'.
		—Brit. Settlements:—Sierra Leo'ne, Grain Coast, Ivory Coast, Gold Coast, Slave Coast, &c.

LOWER GUINEA.—Portuguese Settlements:—Loan'go, Con'go, Ango'la, Bengue'la.

Fort St. Louis (Fr.), 12,000: gt. exports of gum. **Bathurst**, (Brit.) **Bissao** (Port.), ch. seat of the Portuguese slave-trade. **Freetown** (18,000), cap. of Sierra Leone, founded for the suppression of the slave-trade. **Monrovia**, cap. of Liberia, a rep. of Negroes freed from slavery. **Abomey**, gt. traffic in slaves, palm-oil, and ivory; palace guarded by 1,000 women. **Abbeokuta**, said to have 150,000 of pop. **Benin**: gt. exports of slaves; dogs' flesh, roast monkey, bats, and lizards, are said to be sold in the market. **St. Paul de Loanda**, cap. of the Portuguese settlements in W. Africa; the towns of Lower Guinea are all engaged more or less in the slave-trade.

CLIMATE, PRODUCTIONS, &c.—The coasts of W. Africa experience a heat so intense as to cause spirits of wine to boil; and the climate is so extremely unhealthy to Europeans that Sierra Leone has been styled "The White Man's Grave." The soil presents the magnificent vegetation of the Tropics, often producing two crops a-year, and abounding in the richest fruits and flowers. The native govs. are excessively despotic, and the people extremely barbarous. The exports are gold, slaves, ivory, palm-oil, wax, hides, gums, tortoise-shells, rice, cotton, &c. The imports are piece-goods, wires, beads, and cowries (shells used as current money by the natives). The native dress is unbleached cotton, skins, or grass-kilts, and the food consists of goats' flesh, poultry, river-fish, manioc, and pulse.

SOUTH AFRICA.

General Aspect.—S. Africa consists of a series of terraced plateaux, rising from S. to N., separated and supported by mt.-chains parallel to each other, and cut transversely by deep defiles, called *Kloofs*. The rivers are numerous, but most of them small and dry in summer, and none of them navigable.

DIVISIONS AND TOWNS.

Cape Colony.—Cape Town, Port Elizabeth, Graham's Town.	Orange R. Rep.—Bloemfontein.
Caffra'ria.—But'terworth.	Transvaal Rep.—Potchef'strom.
Natal'. — Pie'termaritz'burg,	Bechua'na Country.—Lattakoo'.
D'Ur'ban.	Hottentot' Country.—No town.
	Namaqua' Land.—No town.

Cape Town, (25,000,) 82 m. N. of 'the Cape,' built in Dutch style; strongly fortified; pop. composed of Dutch, British, Hottentots, Negroes, and Malays. **Klipdrift**, (*R. Paal*) centre of the diamond diggings. **D'Urban**, on Port Natal, exports butter, hides, ivory, sugar, coffee, and wool. **Bloemfontein** and **Potchef'strom**, are mere villages. The Hottentots and Namaquas have no towns, but villages of rude huts, called *Kraals*.

CLIMATE, PRODUCTIONS, &c.—The climate is mild and healthy, but very dry. The warmest months are Dec. and Jan.; the coldest June and July. The soil is fertile where well watered, and the vegetation abundant; but the general aspect of the country is barren. No forests occur except in Natal, although the country is covered with thick 'bush' or copsewood, consisting of thorn; 400 species of heaths are found; the aloe is the most useful native plant; and vine-culture is a source of wealth. The minerals are copper ore, gold, and diamonds. The ch. industry is cattle-rearing. The exports are wool, hides, cotton, wine, ivory, aloes, ostrich feathers, &c.

Gov. and People.—Cape Colony and Natal are Brit. colonies; the former founded by the Dutch, by whose descendants, called *boers* or *boers* (farmers), it is still largely peopled. Orange River Free State and Transvaal Rep. are two independent states, occupied mainly by Dutch emigrants from C. Colony, who carry on a trade in wool, ivory, and cattle-rearing. The Caffres (or Kaffirs) are a bold, warlike, and intelligent race, engaged in agriculture and pastoral pursuits. The Hottentots are a lazy, degraded, and filthy race, of which the Namaquas and Bosjesmen (or Bushmen) are a species; while the Bechuanas are a species of Caffres.

EASTERN AFRICA.

General Aspect.—E. Africa has a coast-line of 3500 m., and a breadth of 200 to 600 m., with an estimated area of 1,000,000 sq. m. (excluding Madagascar). The surface strikingly corresponds with that of W. Africa. Pop. 10,000,000.

DIVISIONS AND TOWNS.

Sofála.—Sofála, Sen'a, Tete'.	A'jan.—Bad.
Mozambiq'ue.—Mozambiq'ue,	Somau'li.—Ber'bera.
Quillima'ne'.	Madagas'car.—Tananari'vo, Ta-
Zanguebar'.—Zanzibar', Quil'oa.	mata've'.

Sofala consists of mud huts; exports gold-dust, slaves, ivory, and amber; supposed to be the 'Ophir' of Solomon. **Mozambique**, cap. of Portuguese possessions in E. Africa. **Zanzibar** or **Shanganny** (60,000), by far the largest town on the E. coast, cap. of the Imaum of Muscat's possessions in E. Africa; very unhealthy for Europeans; ch. market in the world for the supply of ivory, gum-copal, and cloves. **Berbera**, a sea-port, with gt. annual fair, attended by merchants from Arabia, India, &c.

The climate is extremely hot and insalubrious, and the rains are periodical. The products and people greatly resemble those of W. Africa. **Mozambique** and **Sofala** are Portuguese possessions under the gov. of a captain-general, and **Zanguebar** belongs to the Imaum or Sultan of Muscat. **Madagascar** is a kingdom with a constitutional or limited gov. under native sovereigns.

NORTH CENTRAL AFRICA.

I.—SAHARA, OR THE GREAT DESERT.

General Aspect.—The Sahara is the largest desert on the face of the globe. Its surface is covered with loose sand, gravel, sun-baked earth, and blocks of stone, often incrustated with salt, and generally destitute of vegetation and animal life. But *oases* or fertile spots are found in hollow tracts watered by springs, inhabited by a pop. estimated at 1,000,000. There are no towns. Numerous caravan routes cross its burning sands, the traveller often suffering severely from thirst and exposure to the simoom, which usually blows 10 or 12 hours continuously, darkening the sun, and impregnating the air with fine sand.

CLIMATE, &c.—The heat is excessive by day, although it is often cold by night. No dew falls, and rain is known only at intervals of many years, when it pours in torrents. The products are dates, gums, and salt; the camel, ostrich, and gazelle, are the only animals of the interior.

II.—SOUDAN, OR NIGRITIA.

General Aspect.—The E. of Soudan, in the basin of L. Tchad, is low and swampy; the W. is traversed by the Niger and its tribs.; and the centre is hilly.

PRINCIPAL STATES AND TOWNS.

IN THE WEST.

Bambar'ra.—Se'go.
Timbuc'too.—Timbuc'too.

IN THE CENTRE.

Bor'gou.—Bous'sa.
Gan'do.—Rab'ba, Eg'ga, Fun'da.

Sokoto'.—Sokoto', Ka'no.

IN THE EAST.

Bor'nou.—Kou'ka, Angor'nou.
Bagir'mi.—Mase'na.
Waday.—Wa'ra.
Darfoor'.—Kobbe'.

Se'go (80,000), on the R. Joliba: here Mungo Park, the gt. African traveller, first saw the Niger. **Timbuctoo** (20,000), on R. Joliba, gt. entrepôt of trade bet. Barbary, Senegambia, and Guinea. **Boussa**, where Park was murdered in 1806.

Rabba (40,000), on R. Joliba; gt. trade in slaves and ivory. **Sokoto** or **Sackatoo** (80,000), the largest city in Central Africa; gt. trade with Guinea and Tripoli. **Angornou** (80,000): extensive trade in slaves, cotton, amber, coal, and metals. **Masena**, a walled town, 6 m. in circuit.

CLIMATE, &c.—The climate is everywhere tropical and intensely hot. Nigritia, or Negroland, is the true home of the Negroes, who are not here mere savages, but are skilful in cultivating the soil, the mnf. of cotton cloths, and the forging of iron implements. Cotton, indigo, and tobacco, are largely cultivated. The ch. exports are gold-dust, iron, ivory, and ostrich feathers. Salt is extremely scarce here, as in Central Africa generally, and forms an important article of import from Barbary.

EXERCISES.—How do you know from the map in what direction the Flat. of Abyssinia slopes? Name and point out the tribs. of L. Tchad and the R. Limpopo. Name from the map the tribes of the Gt. Desert. Point out Kaffa, Londa, and the Makololo Country. What is the difference in time bet. Cairo and Morocco, and bet. Cape Town and London? Group the towns of Africa according to the coast or river-basins on which they are situated. Classify the towns according to their leading characteristics. Give, approximately, the sailing and the direct distances from London to the Strs. of Gibraltar, Alexandria, and Cape Town. Draw a map of each of the foregoing Divisions of Africa.

COUNTRIES OF NORTH AMERICA.

(Revise "North America," pp. 53-60.)

BRITISH AMERICA.

General Aspect.—The W. of British America is a plateau traversed by two lofty mt.-chains; eastwards is a great plain, with the large inland sea of Hudson's B. nearly in the centre, and distinguished by a magnificent chain of lakes, drained partially into Hudson's B., but chiefly N. to the Arctic O., and E. to the Atlantic. Labrador in the E. is a cold, barren, inhospitable plateau.

PROVINCES AND TOWNS.

DOMINION OF CANADA, comprising—

- (1.) **Ontario.**—**OTTAWA**; Kingston, Toron'to, Ham'ilton, Niag'ara; Lon'don.
 - (2.) **Quebec.**—Quebec, Three Rivers, Montreal, Sher'brooke.
 - (3.) **New Brunswick.**—Fred'erickton, St. John.
 - (4.) **No'va Scotia.**—Hal'ifax, Syd'ney, (C. Breton I.)
 - (5.) **Brit. Colum'bia and Stickeen.**—New Westmin'ster, Victo'ria.
- Prince Edward's Island.**—Char'lotte Town.
- Newfoundland.**—St. John's.
- Hudson's B. Territory and Labrador.**—Fort York; Nain.

Largest Towns.—Montreal, 120,000, Quebec, 51,000, Toronto, 45,000, St. John, 40,000, St. John's, 25,000, Halifax, 25,000, Hamilton, 19,000, Ottawa, 15,000, Kingston, 14,000, London, 12,000, Niagara, 10,000.

Ontario, formerly known as Upper Canada, and **Quebec** as Lower Canada. **New Brunswick**, **Nova Scotia**, (including C. Breton I.), **Pr. Edward's I.**, and

Newfoundland, are known as the *Lower Provs.* In Hudson's B. territory, (which comprises $\frac{2}{3}$ of Brit. Am.) the tract bet. Hudson's B. and the Rocky Mts. is known as *Manitoba*, (formerly *Rupert's Land*), with the colony of *Red River Settlement*, S. of L. Winnipeg.

Ottawa (R. Ottawa): gt. deposits of magnetic iron ore. *Kingston*, an important military station, situated on the Lake of the Thousand Isles, the N.E. corner of L. Ontario, said to contain 1700 islets. *Toronto*: gt. exports of wheat; has a univ., and literary and scientific institutions. *Hamilton*, a railway centre; one of the most beautiful and prosperous cities in Canada. *Quebec (St. Lawrence)*, 370 m. from the ocean; former cap. of Brit. Am.; its citadel built on C. Diamond, styled the 'Gibraltar of America'; entrepôt of trade bet. Canada and Britain, &c.; 8 m. N.E. are the *Falls of Montmorenci*, 260 ft. high and 60 ft. wide; near the city the 'Plains of Abraham,' the scene of Wolfe's victory and death in 1759. *Montreal*, on an I. in the St. Lawrence, the largest, finest, and most commercial city in Brit. Am.; centre of a gt. railway system; the *Victoria Bridge*, (tubular,) 2 m. long, the finest in the world. *St. John (St. John E.)*: largest and most commercial town in New Brunswick; gt. trade in timber, fish, and furs. *Halifax*, built of wood and strongly fortified; ch. naval station in Brit. Am.; the harbour one of the best in the world, could afford anchorage for all the navies of Europe. *St. John's*, gt. resort in the fishing season; nearest American port to Gt. Britain. *Fort York*, ch. trading station of the Hudson's B. Company. *Nain*, a missionary station.

CLIMATE AND PRODUCTIONS, &c.—The climate is severe, being extremely cold in winter and hot in summer; but the insular portions are milder. Newfoundland is noted for its dense fogs. The natural vegetable products consist of enormous forests, chiefly of white and red pine. Canada is equal to any country in the world for the growth of wheat and other cereals; and Indian corn, hops, and tobacco, are the common crops. Newfoundland is destitute of timber, the soil is barren and rocky, and kitchen vegetables are the ch. crops. Vancouver's I. consists of fine prairie land; but Brit. Columbia is not well adapted for either cropping or pasture. The minerals are abundant and valuable, including iron, lead, copper, and nickel, with coal in Nova Scotia and New Brunswick, while Brit. Columbia has some of the richest gold-fields in the world. As regards animals, the Hudson's B. Territory is valuable only for its furs, and is under lease to the Hudson's B. Co. as a hunting field, occupied only by a few trappers and traders. Newfoundland has valuable fisheries of cod and seal, chiefly on the Great Newfoundland Bank.

Ch. Industries.—Agriculture, lumbering, (or timber-cutting,) fishing, mining, mfrs., commerce, and shipbuilding.

Ch. Exports.—Timber, wheat, flour, fish, furs, metals, and oil.

PEOPLE.—The pop. consists chiefly of colonists, (emigrants from Britain,) and the Aborigines or Red Indians; but Lower Canada (Quebec) is peopled by the descendants of the first French settlers, who speak French, and profess the R. C. religion. In the extreme N. are a few scattered Esquimaux. In Canada and the Lower Provs., which have been longest settled, education is carefully attended to. The Dominion of Canada (which is a Confederation) has a gov., consisting of a Governor-General appointed by the Brit. Crown, a Senate, and a House of Commons elected by the colonists.

GREENLAND OR DANISH AMERICA.

General Aspect.—Greenland is generally supposed to be an island, or else a group of islands, bound together by eternal frost. Its area is 380,000 sq. miles,—more than three times the size of the Brit. Isles. Its surface is high and rocky, and the interior covered with fields of snow and ice. Glaciers protrude even into the sea, and are broken off by the waves, thus forming icebergs.

CLIMATE, &c.—The climate is very severe, July being the only month that snow does not fall. The vegetation is entirely Arctic, kitchen vegetables being alone cultivated, along with a few patches of corn and potatoes in the S., where, from the verdure of the short summer, it received at first the name of *Green-land*. The people number about 10,000, of whom $\frac{1}{3}$ are Danes, and the rest Esquimaux, converted to Christianity by Moravian missionaries, and chiefly engaged in hunting and fishing. There are no towns, but the largest villages, are Julianshaab, Christianshaab',



ESQUIMAUX VILLAGE.

and Uppernav'ik on the W. coast, the last the most northerly town in the world. The exports are seal-oil, seal-skins, whale-oil, eider down, and furs.

The food of the Greenlanders, like that of Esquimaux in general, consists of fish, reindeer flesh, and whale and seal oil. Their dress consists of deer-skins dried, and their houses of drift-logs or blocks of snow.

UNITED STATES.

General Aspect.—The United States occupy the S. half of the Temperate Zone in N. Am. The form is nearly oblong, being 2,500 m. by 1,300 m. in mean length and breadth; coastline, 12,600 m. The N. part of the Atlantic coast is high and

rocky, with excellent harbours; the S. part and the Gulf coast are low and sandy; and the Pacific coast is high and regular. The surface exhibits the three great physical features of the continent.

STATES AND TOWNS.

I.—EASTERN OR ATLANTIC STATES.—15.

Maine. —Augusta, Port'land.	Pat'erson, Jersey City.
New Hampshire. —Concord, Ports'mouth.	Pennsylvania. —Harrisburg, Philadel'phia, Pitts'burg.
Vermont. —Montpelier, Burlington.	Delaware. —Do'ver, Wil'mington.
Massachusetts. —Boston, Sa'lem, Plym'outh, New Bed'ford, Lowell, Worces'ter.	Maryland. —Annap'olis, Balt'imore.
Rhode Island. —Providence, New'port. [ha'ven.	Virginia. —Rich'mond, Peters'burg, Norfolk, Fred'ricksburg.
Connecticut. —Hart'ford, New-	West Virginia. —Wheel'ing.
	District of Colum'bia. —WASH'INGTON.
New York. —Albany, Troy, Sara'toga, New York, and Brook'lyn; U'tica, Syracuse; Ro'chester, Buff'alo.	N. Caroli'na. —Ra'leigh, Wil'mington.
New Jersey. —Tren'ton, New'ark,	S. Caroli'na. —Colum'bia, Charles'ton.
	Georgia. —Mill'edgeville, Savan'nah.

The States have an average area of 63,000 sq. m., or $\frac{3}{4}$ that of Gt. Britain. The 13 original states are the above, except Maine and W. Virginia. The first six are known as the **New England States**. **Maine**, famous for shipbuilding. **New Hampshire**, mountainous; cotton and woollen mnfs. **Vermont** ('Green Mts.'), pine and cedar forests; maple-sugar largely made. **Massachusetts**: gt. mnfs., viz., boots and shoes, woollen and cotton goods; the first of the States for fisheries, and the second for commerce. **Rhode Island** (not an island), the smallest state, but densely peopled. **Connecticut**, varied mnfs., especially sewing-machines. **New York**, colonized first by the Dutch; the first of the states for pop., wealth, and commerce, with gt. mnfs. **Pennsylvania**, named after Wm. Penn, an Eng. Quaker, who colonized it; first for iron mnfs., second for woollens and shoes. **Virginia**, the first Eng. colony, named after the *Virgin Queen Elizabeth*; seat of much of the Civil War of 1862-6. In the S.E. the **Gt. Dismal Swamp**; in the W. the **Natural Bridge**, 200 ft. high and 90 ft. wide. **Dist. of Columbia**, 60 sq. m., under the control of Congress. **S. Carolina** produces most rice. The two Carolinas and Charleston (town) named after Charles II. of England.

Portland, active commerce. **Bangor**, gt. lumber depôt. **Boston**, largest city in New England, noted for literature, commerce, and mnfs.; ch. seat of the American ice-trade from Wenham Lake, 20 m. N.E.; has extensive suburbs, viz., Cambridge, with Harvard Univ., and Charlestown, b.p. of Benjamin Franklin, in 1706; near it, **Bunker's Hill**, scene of the first gt. battle in the War of American Independence, 1775. **Plymouth**, a small sea-port, the oldest town in New England; the 'Pilgrim Fathers' arrived here from England in 1620. **Lowell** (*R. Merrimac*): ch. seat of cotton mnf., called the 'Manchester' of America. **New Bedford**, most largely engaged in the whale-fishing. **Providence** (*Narragansett B.*): second city in New England; mnfs., literary and educational institutions. **Newport**, famous watering-place. **Hartford**, arms and machinery. **Newhaven**, beautiful town; seat of Yale College.

Albany (*R. Hudson*): ch. univ. of U. S. **Troy**, ironworks. **Saratoga**, watering-place. **New York**, on Manhattan I., at the mouth of Hudson R., largest and most commercial city in U. S. **Buffalo** (*L. Erie*), 16 m. S.E. of Niagara Falls; gt. entrepôt for grain and flour bet. the N.W. and the Atlantic. **Brooklyn**, in Long Island, a suburb of New York. **Syracuse** (*Erie Canal*): gt. salt mnfs. from

salt springs. **Rochester**: very large flour-mills. **Philadelphia** (*R. Delaware*), second largest city in U. S.; noted for its regular streets and extensive mnfs.; here the United States declared their independence in 1776. **Pittsburg**, in the centre of valuable coal and iron mines; ch. seat of iron mnf. **Wilmington** (*Delaware R.*): arsenal and various mnfs. **Baltimore** (*Chesapeake B.*): greatest tobacco and flour market in U. S. **Richmond** (*James R.*), cap. of the Confederate States during the Civil War, 1862-6; largest tobacco mnf. in U. S., and gt. exports of flour, cotton, and tobacco. **Fredericksburg** (*R. Rappahannock*): here the Confederates under General Lee def. the Federal (or Northern) forces, 13th Dec., 1862; near this the b.-p. of Gen. Washington, 1732. **WASHINGTON** (*R. Potomac*), beautiful city, with splendid public buildings:—the Capitol, the Seat of Congress, the 'White House,' the official residence of the president, &c.; 15 m. S.W. is Mount Vernon, the residence and burying-place of Gen. Washington. **Charleston**, ch. town in the S.E. States; gt. exports of rice, cotton, tobacco, &c.; here the Civil War broke out in 1861. **Savannah** (*R. Savannah*): gt. exports of cotton, tobacco, and lumber.

II.—THE GULF STATES.—5.

Florida.—**Talahassee**, **Key West**. **Louisiana**.—**Baton Rouge**, **New Orleans**.
Alabama.—**Montgomery**, **Mobil'e**. **Texas**.—**Austin**, **Galveston**.
Mississippi.—**Jack'son**, **Nat'chez**.

Florida: in the S. are immense swamps, called the 'Everglades,' 160 m. by 60 m., filled with islands covered with dense jungle of vines, evergreens, pines, and palmettos. **Louisiana** yields the most sugar-cane; **Mississippi**, the most cotton; **Texas** has extensive herds of cattle.

Key West, on an I., one of the Florida Keys, (coral islands,) commands the entrance to the G. of Mexico. **Natchez**, **Mobile**, (pron. *Mobeel*), and **New Orleans**, noted for gt. exports of cotton; but **New Orleans** (*R. Mississippi*), the greatest cotton market in the world; greatest in the U. S. for sugar and molasses; largest town in the S., and next to New York for commerce.

III.—CENTRAL STATES AND TERRITORIES.

(13 States and 2 Territories.)

Tennessee.—**Nash'ville**, **Mem'phis**. **Illinois**.—**Springfield**, **Chicago**.
Kentuck'y.—**Frank'fort**, **Louisville**. **Minnesota**.—**St. Paul**.
Ohio.—**Colum'bus**, **Cincinnati**, **Cleveland**, **Day'ton**. **Iowa**.—**Des Moin'es**, **Dubuque**.
Indiana.—**Indianapolis**. **Missouri**.—**Jefferson**, **St. Louis**.
Michigan.—**Lansing**, **Detroit**. **Arkansas**.—**Little Rock**.
Wisconsin.—**Madison**, **Milwaukee**. **Indian Territory**.—**Tahlequah**.
Kansas.—**Topeka**.
Nebraska.—**Omaha**.
Dakota, (Ter.)—**Yankton**.

Kentucky, noted for its caverns—the largest, the Mammoth Cave, 10 m. long. **Ohio**, the third state for pop. **Illinois**, **Wisconsin**, **Minnesota**, **Iowa**, and **Missouri**, are fertile prairie lands. **Michigan** has copper and iron in the N.

Louisville (*R. Ohio*): extensive trade and mnfs. **Cincinnati** (*R. Ohio*), largest city in the Central States, styled the 'Queen of the West'; greatest pork market in the world; gt. transit trade. **Detroit**, shipbuilding, brass and iron foundries. **Milwaukee** (*L. Michigan*), famous for brickmaking. **Chicago** (*L. Michigan*): the greatest grain exports in the world; remarkable for its rapid growth—in 1831 had only seven or eight families; almost totally destroyed by fire in 1871, when 500 persons were killed out of nearly 350,000 of pop., 12,000 houses burned, and 100,000 persons rendered homeless. **St. Paul**, at the head of the navigation of the Mississippi. **St. Louis** (*R. Mississippi*), gt. military station; immense transit trade; depôt of the fur-trade of the Rocky Mts. **Dubuque**: gt. shipments of lead. **Omaha** (*R. Missouri*), the midway station of the Gt. Pacific Railway from New York to San Francisco (California) via Chicago and Great Salt Lake (3800 m.)

IV.—WESTERN OR PACIFIC STATES AND TERRITORIES.

(3 States and 9 Territories.)

Califor'nia.—Sacramen'to, San Francis'co.
Neváda.—Car'son City.
O'regon.—Sa'lem.

U'tah.—Gt. Salt Lake City.
Arizo'na.—Tuc'son.
New Mexico.—San'ta Fe'
Colorádo.—Den'ver.
Wyoming.—Fort Lar'amie.
Montána.—Virgin'ia City.

TERRITORIES.

Wash'ington.—Olym'pia.
Idáho.—Boi'see' City.

Alias'ka.—New Archan'gel.

California, famous for its gold-diggings; its quicksilver mines the richest in the world. Oregon and Washington abound with forests. Utah, inhabited by the Mormons, is fertilized by artificial irrigation. Much of the table-land of the Gt. Basin is rainless and barren, the soil being mixed, and sometimes incrustated with salt. The Territories are not yet organized into states, but are under the control of a governor. The Indian Ter. is occupied by the native Indians, who have been collected thither out of the various states. Alaska, in the N.W. corner of N. Am., purchased by U. S. from Russia; inhabited chiefly by Esquimaux and Indians.

Sacramento (*Sacramento R.*): extensive commerce. San Francisco, the most commercial city on the Pacific. Gt. Salt Lake City (*Jordan R.*), settled by the Mormons in 1847, and forming the head-quarters of the sect. All civil and ecclesiastical power is vested in the priests, and polygamy is allowed.

Largest Towns.—New York, 926,000, Philadelphia, 637,000, Brooklyn, 397,000, Chicago, 349,000, St. Louis, 313,000, Baltimore, 277,000, Boston, 251,000, Cincinnati, 219,000, San Francisco, 150,000, Washington, 109,000, Pittsburg, 87,000.

The following in order are above 20,000, viz.:—Buffalo, Newark, Louisville, Albany, Providence, Charleston, Detroit, Milwaukee, Richmond, Newhaven, Cleveland, Mobile, Portland, Memphis, Savannah, Wilmington.

CLIMATE, PRODUCTIONS, &c.—The climate partakes generally of the character of that of the continent, but over so extensive a region there is great variety. The mineral products are very great and varied, such as the gold and quicksilver of California,



MAIZE AND COTTON.

the silver of California, Nevada, and New Mexico, the iron, coal, and petroleum of Pennsylvania, mts. of iron-ore in Missouri, copper near L. Superior, and lead in Illinois, Wisconsin, and Iowa. The vegetation of the N. most nearly resembles that of Britain—the most important crops being wheat, maize, flax, tobacco, apples, peaches, and grapes. In the S. it is more of a tropical character—the forest-trees including the magnolia, palmetto, &c., and the cultivated plants being the sugar-cane, cotton, tobacco, rice, maize, sweet potatoes, oranges, &c.

The great corn-producing regions are the Central States, especially Illinois, Indiana, and Wisconsin; the cotton-states are chiefly S. Carolina, Georgia, and other S.E. states; tobacco is grown chiefly in Maryland, Virginia, Kentucky, Tennessee, and N. Carolina; rice in S. Carolina; sugar-cane in Louisiana, Georgia, and Florida; while in the N. the sugar-maple takes the place of the sugar-cane.

The few remaining wild animals are mostly confined to the region W. of the Mississippi. Turkeys abound in the prairies, alligators are found in the southern swamps, and rattlesnakes in many parts of the country. The ch. industries are agriculture, manufacturing, mining, fishing, and commerce,—agriculture chiefly in the Mississippi region, manufacturing in the Appalachian, and mining in the Rocky Mt. region. The ch. mnfs. are cotton and iron

Ch. Exports.—Wheat, flour, rice, cotton, tobacco, hams, cheese, &c.

Ch. Imports.—Tea, coffee, sugar, (refined,) fine manufactured goods, &c.

PEOPLE.—The people are densely settled in the eastern states, and more densely in the N. than in the S.; but the tide of emigration is rapidly advancing westwards. Six-sevenths of the pop. are Whites, chiefly of British and Irish extraction; but Germans, Dutch, and French, are numerous. The Negroes, who number more than 4,000,000, are most numerous in the S., and were slaves till 1866. The Eng. language predominates. Education is universally diffused in the N., but the lower classes in the S. are very ignorant. The people generally are remarkable for intelligence and enterprise. There is no established religion, and the variety of Christian sects is enormous; but the principal of these are Methodists, Baptists, and Presbyterians. The gov. is a Federal Rep., governed by a President, elected to hold office for four years. The Congress, or Legislature, consists of a Senate, or Upper House, and the House of Representatives.

MEXICO.

General Aspect.—The form of Mexico has been compared to a cornucopia, with its mouth to the N. The surface consists, for the most part, of an immense plateau, from which numerous volcanic peaks rise above the snow-line, (15,000 ft.) This table-land divides on the N. into three mt.-chains, the centre one merging into the Rocky Mts. With two exceptions, the rivers are generally mere torrents, and small lakes are numerous.

TOWNS.

<p>In the Interior.—Mexico, La Puebla, Oaxá'ca, Queretá'ro, Guanajuat'o, Guadalaxá'ra, San Luis Poto'si, Chihua'hua, Zacate'cas, Monterey'.</p>	<p>E. Coast.—Matamo'ras, Tampi'co, Vera Crúz, Campea'chy, Merida. W. Coast.—Tehuantepec', Acapul'co, Mazatlan'.</p>
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Largest Towns.—Mexico, 210,000, La Puebla, 76,000, Guadalajara, 70,000, Guanajuato, 68,000, Queretaro, 48,000, San Luis, 34,000. These are all in the table-land of the interior, the coast-towns being very unhealthy.

Mexico (*L. Texcoco*), 7470 ft. above sea-level, and surrounded by lofty vols.; a fine and wealthy city, with many magnificent public buildings. **La Puebla**: numerous churches; muls. of glass, soap, steel, &c. **Queretaro**: magnificent aqueduct, 10 m. long. **Guanajuato**, (*s=h*), **Zacatecas**, (*s=th*), and **Chihuahua**: rich silver mines. **Guadalajara**, the most important city, next to Mexico; noted for its jars made of scented earth. **Monterey**, most important town in the N.; gold, silver, and lead mines. **Matamoras**: exports specie, hides, wool, and horses. **Vera Cruz**, **Tampico**, **Acapulco**, and **Mazatlan**, ch. sea-ports; **Vera Cruz**, seldom free from yellow fever. **Tehuantepec**, sold to the U. S. for 25,000,000 dollars.

CLIMATE, PRODUCTIONS, &c.—The climate varies with elevation—moist, hot, and unhealthy along the low narrow coast regions; temperate on the slopes of the uplands; cold and dry on the table-land. Vegetation also varies with elevation, that of the low lands being tropical. The plants indigenous to Mexico are cocoa and vanilla, (for making chocolate,) the medicinal plants, sarsaparilla and jalap, the cactus, which furnishes food to the cochineal insect, (so useful for dyeing,) and the maguey, whose juice is a favourite beverage of the Mexicans. Mexico has long been celebrated for its minerals, its supply of the precious metals being almost exhaustless, but the silver mines are not so productive as formerly; coal is nowhere found. The chief industries are mining and agriculture; and the exports are metals, cochineal, mahogany, dyewoods, hides, and medicinal plants. There are no roads fit for wheeled vehicles, and mules are the only beasts of burden.

PEOPLE.—The people consist chiefly of Indians, only about one-eighth being Spaniards, while about one-fourth are a mixed race, known as *Mestizos*, *Mulattoes*, *Quadroons*, &c. The Spaniards (who originally conquered the country) are the wealthy class, while the Indians are in a degraded condition. The gov. is a Rep., on the model of the U. S.; but it is weak and unsettled, revolutions and insurrections being frequent. Mexico abounds with remains of its former greatness and civilization.

CENTRAL AMERICA.

General Aspect.—Central Am. seems, in a general sense, to be a continuation of Mexico. The surface consists for the most part of table-land, surrounded by numerous cone-shaped vols., sloping gradually to the G. of Mexico, and becoming quite low towards the Isth. of Panama.

DIVISIONS AND TOWNS.

Guatimá'la. —New Guatimá'la.	Nicarag'ua. —Manag'ua, Leon'.
San Salvador. —San Salvador', Cojutepec'.	Mosquitia. —Blewfields, Grey'- Costa Ri'ca.—San Jose'. [town.]
Hondur'raa. —Comayag'ua.	Brit. Hondur'raa. —Bali'ze.

Guatemala has a remarkable water vol.; most prosperous state of Central Am. Honduras (including the Bay Is.), and Brit. Honduras, or Belize (pron. *Bulerr*'), famous for forests of mahogany and logwood. Nicaragua includes Mosquitia or Mosquito Coast.

The largest towns are on the table-land, and many of them have suffered severely from earthquakes. New Guatemala (40,000): mnfa. of muslin and artificial flowers. San Salvador, destroyed by an earthquake in 1854, but now rebuilt. Leon (25,000), one of the finest cities of C. Am. San Jose', pop. 25,000.

The climate, productions, and pop. of C. Am. are similar to those of Mexico. The ch. industries are agriculture, mining, and cutting of mahogany and dyewoods for exportation. Except in Brit. Honduras, which is a Brit. colony, the form of gov. is republican, each of the five states of C. Am. being independent.

WEST INDIES.

General Aspect.—The W. Indies form an immense archipelago, extending in a curve from Florida to the mouth of the Orinoco. It is composed of three great groups and one minor one along the N. coast of S. Am. The surface is varied; the Bahamas, being of sand or coral formation, are low and flat, and surrounded by shoals and reefs; the Great Antilles are traversed by an elevated mt.-chain. Most of the Is. are of volcanic origin.

DIVISIONS.

Baha'ma Is.—Gt. Baha'ma, Ab'aco, Eleu'thera, New Providence, An'dros, San Salvador', Turk's and Ca'icos Is., &c.
Gt. Antill'es.—Cu'ba, Hay'ti, Porto Ri'co, and Jama'ica.
Little Antill'es.—1. Virgin Is.; 2. Leeward Is.; 3. Windward Is.
Venezuelan Coast Chain.—Margarita, Tortu'ga, Buen Ayre, Curaç'o.

The most of the Is. belong to European Powers, Spain claiming more than one-half of the whole area, and Gt. Britain more than one-sixth. They are divided as follows:—

Spain.—Cuba, Porto Rico, Isle of Pines, and two of the Virgin Is.
Britan.—The Baha'mas, Jama'ica; Torto'la, Anega'da, Virgin Gord'a (Virgin Is.); Trinidad', Toba'go, Grenada, St. Vin'cent, St. Lucia, Barba'does (Windward Is.); Domin'ca, Montserrat', Anti'gua, St. Christopher's, Barbuda, Anguilla (Leeward Is.)
France.—Guadeloup'e, Martinique, Desirad'e, Ma'riegalant'e, Les Saintes, N. part of St. Martin.
Holland.—St. Eustatius, Sa'ba, S. part of St. Martin (Leeward Is.); Oruba, Curaç'o, Buen Ayre (Venezuelan Coast Chain.)
Denmark.—St. John, St. Thomas, Santa Cruz (Virgin Is.)
Sweden.—St. Bartholomew (Leeward Is.)
Venezuela.—Margarita, Tortu'ga, &c. (Coast Chain.)
Hay'ti and Domin'ca (independent).—1. of Hay'ti, San Domin'go or Hispaniola.

TOWNS.

Spanish.—Havan'a, Santia'go, Matan'zas, Por'to Prin'cipe'; San Ju'an.

British.—Nassau' (New Providence); King'ston, Port Royal (Jamaica); Port of Spain (Trinidad); Bridge'town (Barbadoes); King'ston (St. Vincent); St. John's (Antigua).

French.—Basse Terre (Guadeloupe); Point-a-Pitre, St. Pierre (Martinique).

Independent.—Port-au-Prince (Hayti); San Domin'go (Dominica).

Largest Towns.—Havana, 200,000, Santiago, 87,000, Matanzas, 86,000, Kingston, 82,000, Port-au-Prince, 81,000, Porto Principe, 80,000, St. Pierre, 23,000, Bridgetown, 22,000, Point-a-Pitre, 20,000.

Havana or The Havannah, one of the most commercial cities in America; noted for cigars; its cath. contains the remains of Columbus. **San Salvador**, or **Guanahani**, one of the Bahama Is., the first portion of America discovered by Columbus. **Kingston**, ch. commercial city of Jamaica. **Port of Spain**, handsome town on a spacious harbour; the I. of Trinidad has a pitch lake and mud vol. **Barbadoes**, England's first colony, founded 1625. **Bridgetown**, seat of gov. of the Windward Is. **St. John's**, seat of gov. of the Leeward Is. **San Domingo**, oldest city in America, founded by Columbus in 1502. **St. Thomas** (Virgin Is.), central packet-station for the W. Indies, Mexico, Central Am., and S. Am.

CLIMATE, PRODUCTIONS, &c.—The climate of the lowlands is very hot and unhealthy, although the heat is tempered by cooling sea-breezes in the afternoons. Snow is unknown. The Is. are subject to fearful thunderstorms, hurricanes, and earthquakes. The soil is very productive, and has tropical vegetation, the ch. products being sugar-cane, coffee, cotton, tobacco, maize, (the ch. article of food,) indigo, arrow-root, pepper, and other spices. The forest-trees include mahogany and dyewoods. The minerals are plentiful in the Spanish Is., lead and copper in Jamaica, salt in the Bahamas, and asphalt in Trinidad. The only wild animals now found on the Is. are the wild hog and monkey, but there are many beautiful birds and insects.

The people consist of Whites, Negroes, and Mulattoes. The Negroes, who are very numerous, were formerly slaves, but are now freed, except in the Spanish Is. The field work is performed by Negroes, the climate being too hot for European labour. The descendants of European parents born in the W. Indies are termed Creoles.

There are only two native govs., viz., Hayti, in the W. end of the I. of Hayti, formerly French, and Dominica, in the E. end, formerly Spanish, and they are both Reps. The Spanish Is. are each governed by a Captain-General appointed by the Spanish Crown; the other foreign possessions by Governors and Councils, the Brit. having in addition Representative Assemblies.

EXERCISES.—Name the rivers draining the N. of N. Am. into the Hudson's B., the Arctic O., and the Atlantic. What are the two exceptions to the rivers of Mexico? Why are the towns of Central Am. on the table-land, and not on the coast? How many states and territories are in the U. S.? What is the name of the central mt.-chain of Mexico on the N.? Name from the map the mts. of Cuba and Jamaica. Group the towns according to coast or river-basin on which they are situated. Group them according to pop. Classify them according to leading characteristics. Give the direct and the sailing distances bet. London and Montreal, New York, New Orleans, San Francisco. Draw a map of each country of N. Am.

COUNTRIES OF S. AMERICA.

(Revise "South America," pp. 60-66.)

BRAZIL.

General Aspect.—Brazil occupies the greater portion of the E. and Centre of S. Am. Its surface is mountainous in the E. and S., level in the N. and W.; the former an immense plateau, extending 2,000 m. inland; the latter consisting chiefly of the rich forest-plains of the Amazon and its gigantic net-work of affluents.

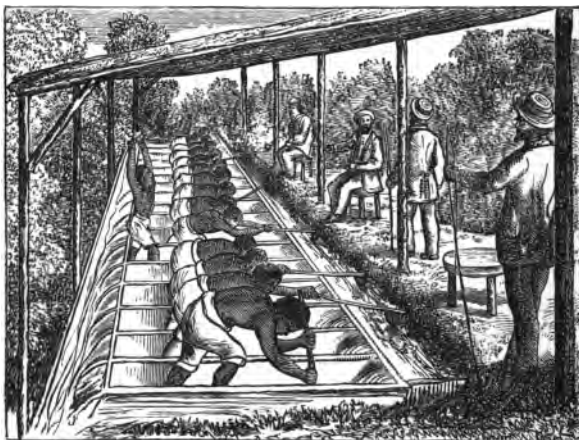
In point of size, Brazil is the fifth largest state in the world, being surpassed only by the British, Russian, and Chinese Empires, and the U. S. of N. Am.

TOWNS.

S.E. Coast.—RIO DE JANEIRO, N.E. Coast.—Maranhão, Pará.
Bahia, Pernambúco, Pará—Inland.—Ou'ro Preto, San Pau-
hy'ba. lo, Cuyabá, Mat'to Gros'so.

RIO DE JANEIRO, (400,000,) largest and most commercial city in S. Am.; the harbour capacious enough to hold, with ease, all the navies of the world; the new town built in the European style, with houses of granite, and amidst the finest scenery; gt. exports of coffee. **Bahia**, or **San Salvador**, (125,000,) former cap., has a fine appearance; next to Rio for size and commerce. **Pernambuco**, (100,000,) comprises several towns,—the principal Recife, the third largest sea-port, so called from the coral reef, (*recife*), which forms a breakwater to the fine harbour. **Ouro Preto**, cap. of the richest mining province in Brazil, and formerly called *Villa Rica*, ('Rich Town,') from its rich gold mines. **Cuyaba**: famous gold and diamond mines, worked for more than 150 years. **Matto Grosso** exports gold, diamonds, and ipecacuanha.

CLIMATE, PRODUCTIONS, &c.—The climate of the Amazon Valley is tropical, of the Centre and W. more varied, while that of the S.E. coast is as genial as that of Italy. The vegetation



DIAMOND WASHING.

is most luxuriant and varied, the whole of the interior being covered with vast forests. Only about one acre in 150 is cultivated; but the ch. products are coffee, (supplying one-half the coffee produced in the world,) sugar, cotton, rice, maize, cocoa, manioc, tobacco, &c., with the *Yerba Mate'* or Paraguay tea in the W. The minerals are important and varied, the diamond-mines in the river-beds being the richest in the world. Among the wild animals of the continent are a great variety of birds of the richest plumage. The ch. industries are agriculture and mining, nearly all the labour being performed by slaves.

GUIANA.

General Aspect.—The coast region is low, being protected from the sea by *dykes*, and extends about 50 m. inland. The surface is then traversed by successive terraces from E. to W., with wide forest-covered valleys between. The Acarai Mts., in the S., separate Colonial from Brazilian Guiana.

DIVISIONS AND TOWNS.

British Guai'na.—George'town, New Amsterdam'.	Dutch Guai'na.—Paramari'bo. French Guai'na.—Cayen'ne.
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Brit. Guiana comprises three settlements,—viz., Berbice (*Berbees'*), Demera'ra, and Essequi'bo, (*qui = kee*), so called from the rivers on which they are respectively situated. Georgetown, (29,000,) built of wood; streets broad and traversed by canals, with numerous bridges; $\frac{4}{5}$ of the pop. are negroes. Paramaribo, (16,000,) like Georgetown in appearance; the streets lined with orange, lemon, and tamarind trees; gt. trade, and an hospital for lepers. Cayenne, (6,000,) a mean, wretched place, used as a penal settlement by France.

CLIMATE, PRODUCTIONS, &c.—The climate is hot and humid, and in the maritime region exceedingly unhealthy. There are two dry and two rainy seasons in the year of three months each. The soil is exceedingly fertile. The forest-trees are magnificent, and include dyewoods, palms, and valuable timber. The ch. vegetable products are sugar-cane, coffee, cotton, the finest tropical fruits and medicinal plants, Cayenne pepper, and other spices.

COLOMBIA.

(Venezuela, Granadian Confederation, and Ecuador.)

General Aspect.—The surface of these three states is highly diversified, having in the W. three parallel ranges of the Andes, embracing the grandest vols. of the globe, and the immense llanos of the Orinoco in the E.

DIVISIONS AND TOWNS.

Venezue'la.—CARAC'AS, Cumaná', Valen'cia, Maracay'bo.
Grana'dian Confed.—BOGO'TA, Cartage'na, Panamá', Popayan'.
Ecuador.—QUITO, Riobam'ba, Cuen'ca, Guayaquil'.

CARACAS, (50,000,) nearly destroyed by an earthquake in 1812, when 12,000 persons perished; b.-p. of Gen. Bolivar, the liberator of Spanish Am. Cumaná, ch. sea-port of Venezuela. BOGOTA, (43,000,) large and handsome city, with

univ. and fine cath.; fine scenery; its buildings are low, and have thick walls, to guard against earthquakes. *Cartagena*, important port and arsenal. *Panama*, with excellent harbour and a good trade. *QUITO*, (76,000,) in a ravine at the base of the vol. of Mt. Pichincha, 9,543 ft. above the sea, and surrounded by snow-clad mts.: has a most delightful climate, but is exposed to violent earthquakes. *Guayaquil*, (*quit* = *keel*), ch. port of Ecuador, with the finest harbour in the Pacific.

CLIMATE, PRODUCTIONS, &c.—In the lower grounds the climate is hot, moist, and unhealthy, but the table-lands enjoy perpetual spring. The vegetation is varied and luxuriant. The forests yield cabinet and dyewoods, palms, (the most useful being the *sago palm*,) the *cow-tree*, (which, when cut, yields a juice like milk,) *plantain*, (the staple food of the people,) *Peruvian bark*, *caoutchouc*, *resins*, &c. The *llanos* are not suitable for agriculture, being exposed to extremes of drought and humidity, but they sustain vast herds of cattle and horses, whose hides and tallow form articles of export. The mineral wealth is great, especially in Ecuador and the Granadian Confed. All kinds of industry are much neglected, and internal commerce here, as in S. American countries generally, is greatly impeded from want of roads. These three countries, once united, are now separate and independent republics, the Granadian Confed. being also styled the U.S. of Columbia. The people consist largely of mixed races.

PERU AND BOLIVIA.

General Aspect.—Peru and Bolivia are traversed throughout their entire length by two lofty parallel ranges of the Andes, dividing the country into three physical regions,—viz., 1. The Western or Coast Region, 1,500 m. in length, and 60 m. in breadth, extending from the Pacific to the base of the Andes; 2. The Central Region, bet. the crests of the two Cordilleras, consisting of plateau 12,000 ft. high, with numerous towns and villages; and, 3. The Eastern Region, consisting of immense plains, covered with vast forests, which extend up the mt.-sides, and containing the head-waters of the Amazon.

TOWNS.

Peru.—*LI'MA*, *Calla'o*; *Arequi'pa*, *Cuz'co*, *Ayacu'cho*, *Pas'co*.

Bolivia.—*CHUQUISACA*, *Poto'si*, *Cochabam'ba*, *La Paz*.

LI'MA, (100,000,) 7 m. from the sea, *Callao* being its port; long the ch. commercial mart on the W. coast of S. Am.; founded by *Pizarro*, the conqueror of Peru, in 1534; a regular, well-built city, but with houses one storey high, with flat roofs and unglazed window, to withstand earthquakes. *Arequipa*, well built and flourishing, subject to earthquakes. *Cuzco*, (45,000,) cap. of the anc. empire of the Incas, who ruled Peru before its conquest by the Spaniards. *Ayacucho*, formerly called *Huamanga*: a univ. and splendid cath. *Pasco*, 13,720 ft. above the sea, the most elevated city in the world; in the centre of rich silver mines.

CHUQUISACA, (24,000,) also called *Sucre*, ('place of gold'), and formerly *La Plata*, ('silver'); 9,342 ft. above the sea; has a univ. and fine cath. *Potosi*, (23,000,) at the foot of a silver mt., called *Cerro de Potosi*, perforated with silver mines, the richest in the world; second highest city in the world. *Cochabamba*, (41,000,) a beautiful city, with fine cath. and palace; its fertile district styled the 'Granary of Peru.' *La Paz*, (76,000,) bet. *L. Titicaca* and *Mt. Illimani*, is the most commercial town.

CLIMATE, PRODUCTIONS, &c.—Between the Pacific and the Andes is an arid, rainless, barren district; the want of rain being, in a measure, compensated for by a moist fog called the *Garua*. The Central Plat. is mild and salubrious, while the Eastern Region is hot and humid. The valleys and table-land are productive. Of the vegetable products, the cinchona, or Peruvian bark, is one of the most important. The animals include the llama, used as a beast of burden, and the alpaca, useful for its wool. Mules are most employed for travelling. The minerals of these countries, including the precious metals, are the ch. source of wealth; but the mines are not efficiently worked for want of proper machinery, roads, and other means of transport. The passes of the Andes are steep, narrow, and dangerous. Guano is exported in great quantities, chiefly from the Chincha Is.

CHILI AND PATAGONIA.

General Aspect.—The surface of Chili consists of a long, narrow strip of land bet. the Pacific and the Andes, formed chiefly of the mt. slopes. Here the Andes attain their greatest elevation. Patagonia, 1,100 m. in length, has a lower elevation, the W. coast being greatly indented, and the E. a series of terraces, extending over 700 m.

TOWNS.

Chili.—SANTIA'GO, Valparai'so, Concep'cion, Valdivia, Copia'po. Patagonia.—PUNTA AREÑAS.

SANTIAGO, (115,000,) on R. Mapocho, amid sublime scenery, at the foot of the Andes; houses low, on account of earthquakes; here, in 1863, occurred in a church a most terrible conflagration, when 2,100 females perished. **Valparaiso**, ('Vale of Paradise,') 75,000; the most commercial city. **Valdivia**, penal settlement of Chili and Peru. **Copiapó**, centre of the ch. mining district.

CLIMATE, PRODUCTIONS, &c.—The northern part of the country is rainless and barren, and known by the name of the Desert of Atacama; but the central portion is delicious and luxuriantly fertile. There is but little rain E. of the Andes in Patagonia. In the centre and S. of Chili, vegetation is abundant, the products including potatoes, which are understood to be natives of Chili. The animals include the puma and the condor in Chili, and the guanaco in Patagonia. The mineral resources are great, especially copper, silver, gold, coal, precious stones, &c. The ch. industries are mining and agriculture. The people consist of descendants of Spaniards in the N. and centre, and of Indians in the S. Chili is the most prosperous of S. American states. Patagonia is claimed by the Chilians, who have given it the name of the Colony of Magellan, but it is also claimed by the Argentine Confeder. The native Indians are a tall, muscular race, nomadic, and subsisting by hunting and fishing.

THE ARGENTINE CONFEDERATION, OR LA PLATA.

General Aspect.—The surface consists of pampas in the S., and the plain of El Gran Chaco in the N., only a few feet in eleva-

tion. The first is destitute of trees, and covered with luxuriant pasture, tall grass, clover, and thistles, with a vast number of small salt lakes; the second is an arid desert plain.

Towns.—BUENOS AYRES, Rosá'rio, Parana', San'ta Fe', Corrientes; Cordo'va, Sal'ta, Tucuman, Mendoza.

BUENOS AYRES, ('Good Air,') 120,000, a large handsome city, and ch. commercial town; noted for jerked beef; many Eng. and French merchants. Córdova and Salta: gt. trade in horses and mules; Córdova has mnfs. of coarse woollens, turned articles, and Morocco leather. Mendoza, ch. entrepôt of trade bet. Buenos Ayres and Chili.

CLIMATE, PRODUCTIONS, &c.—The climate is, in general, hot and very dry, and on the plateaux in the W. salubrious, but in the E. rain is abundant. Little of the soil is cultivated, the rest being roamed over by vast herds of cattle and horses in a wild state. The exports are hides, horns, tallow, and jerked beef. The people consist of Spaniards, Indians, and mixed races. The inhabitants of the pampas are Gauchos, who pass most of their time in the saddle, galloping after their cattle.

PARAGUAY AND URUGUAY.

General Aspect.—Paraguay is wholly inland, bounded E. and W. by the Parana and the Paraguay, hilly in the N.E., and flat and swampy in the S. Uruguay is hilly in the interior, but level along the coast, and destitute of wood.

Towns.—ASUNCION; MONTE VIDEO.

ASUNCION or Assumption, (8,000,) at the confluence of the Paraguay and the Pilcomayo; gt. trade in tobacco, sugar, hides, timber, and mate'. MONTE VIDEO, (120,000,) 'View Mt.' so named from a mt. behind; a gt. commercial emporium, especially for the essence of meat.

The climate, though damp, is generally temperate and healthy. No minerals have yet been discovered in Paraguay, but they are very abundant in Uruguay. In every other respect these two countries greatly resemble the Argentine Republic.

EXERCISES.—Which two states of S. Am. does Brazil not reach? Name the vols. of Ecuador. Why are the ch. towns situated on the highlands of Ecuador and Granadian Confederation? Where are the ch. seats of pop. of Peru and Bolivia? Group the towns of S. Am. according to coast or river-basin on which they are situated. Classify the towns according to their leading characteristics. Give the sailing and direct distances from London to Rio de Janeiro, Buenos Ayres, Santiago, and Lima. Draw a map of S. Am., inserting the towns.

COUNTRIES OF OCEANIA.

(Revise "Oceania," p. 66.)

I.—AUSTRALASIA.

1. AUSTRALIA OR NEW HOLLAND.

General Aspect.—Australia, the smallest of the continents, is of an irregular onion form. Along the N.E. coast, at 20 to 60 m. from the shore, extends the Gt. Barrier Reef, 1,200 m. long,

and from a few hundred yards to 1 m. in width. The surface of the interior is level and low-lying, surrounded by a border of more elevated land, especially along the eastern shore, where Mt. Kosciuszko, in the Australian Alps, rises to 7,308 ft. The surface of Tasmania is diversified with mt. peaks, table-lands, plains, and valleys. The rivers are few and unimportant.

BAYS AND STRAITS.

N. Coast.—G. of Carpentaria, Van Die'men's G., and Queen's Chan.; Tor'res Straits, bet. C. York Pen. and New Guinea.	St. Vin'cent G., Spen'cer G., Encoun'ter B., Port Phil'ip; Bass Str. bet. Victoria and Tasmania.
W. Coast.—King Str., Ex'mouth G., Shark B., Geograph'e B.	E. Coast.—More'ton B., Her'vey B., Halifax' B., Princess Charlotte B.
S. Coast.—Gt. Australian Bight,	

ISLANDS.

In the N.	In the S.
Mel'ville I. and Bath'urst I.	Kangaroo' I., King's I., and Furneaux' Is.

CAPIES AND PENINSULAS.

N. Coast.—C. York, C. Arn'- hem; C. York Pen. and Arn'hem Pen.	S. Coast.—C. Ar'id, C. Catas'- trophe', and C. Wil'son; Eyr'ia Pen. and York Pen.
W. Coast.—C. Lon'donderry, C. Leeu'ue, N.W. Cape, and C. Leeu'win.	E. Coast.—C. Howe, Sandy C., and C. By'ron, C. Mel'ville.

MOUNTAINS.

Blue Mts., Liverpool, and New England Ranges, in N. S. Wales.
Australian Alps, Pyrenees, and Grampians, in Victoria.
Gawler Ra. and Flinders Ra., in S. Australia.

RIVERS.

R. Murray, from the Australian Alps, flows W. and S. through
Victoria, New S. Wales, and S. Australia, into Encounter B.;
length, 2,000 m.; area of basin, 500,000 sq. m.
Triba.—Dar'ling and Murrumbidgee.

LAKES.

La. Tor'rens, Eyre, Frome, Gregory, and Gairdner, in S. Australia.
La. Austin and Moore, in W. Australia.

DIVISIONS AND TOWNS.

New South Wales.—Syd'ney, Paramat'ta, Newcas'tle, Mait'land,
Bath'urst.
Victoria.—Mel'bourne, Geelong', Sand'hurst, Ballarat'.
S. Australia.—Adelaid'e, Koorin'ga.
W. Australia.—Perth, Freeman'tle.
N. Australia.—Port Dar'win.
Queens'land.—Bris'bane, Ips'wich, Rockhamp'ton.
Tasma'nia.—Ho'bart Town, Launce'ston.

Largest Towns.—Sydney, 140,000, Melbourne, 130,000, Ballarat, 40,000, Adelaide, 25,000, Geelong, 23,000, Brisbane, 20,000, Sandhurst, 18,000, Newcastle, 10,000, Maitland, 10,000; Hobart Town, 20,000.

Sydney, (*Port Jackson*), large, elegant, and commercial city; exports gold and wool. **Parramatta**, oldest town in the colony; orchards and vineries. **Newcastle**: valuable coal-mines. **Maitland**, in an extremely fertile district, termed the 'Granary of New S. Wales.' **Bathurst**, ch. town in the gold region. **Melbourne**, (*Yarra Yarra*), 8 m. from Port Philip; two-thirds of its large exports consist of gold. **Geelong**: gt. exports of wool. **Sandhurst**, a mining town. **Ballarat**, second to Melbourne; centre of the richest gold mining district in the world. **Adelaide**, (*Torrens*), 8 m. from the sea; exports wool and copper. **Kooronga**: copper mines. **Brisbane** exports wool. **Hobart Town** (*R. Derwent*): fine harbour, with extensive foreign commerce. **Launceston**, in the N.: considerable trade with Victoria and New S. Wales.

CLIMATE, PRODUCTIONS, &c.—The climate of the Australian colonies is generally very dry, but the N., being situated within the Tropics, is subject to periodical rains and a high temperature. In Tasmania it is delightful, and highly salubrious. The vegetation is peculiar to Australia, consisting principally of gum trees, acacias, and heaths. Our important food-plants are successfully cultivated. The animals are peculiar; no quadrumana, pachydermata, and ruminantia are found, but 105 species of marsupialia or *pouched* animals. The most important animals are the kangaroo, the ornithorynchus or water-mole, and the dingo or Australian dog. The emu, lyre-bird, and black swan, are peculiar. The domestic animals have been introduced from Europe, and thrive admirably. The minerals are gold, copper, coal, and iron. The ch. industries are mining, pastoral, and agricultural pursuits. The ch. exports are gold, copper, and wool, and the imports are grain, flour, and manufactured goods.

PEOPLE.—The pop. consists mostly of Brit. settlers and their descendants. There is no established religion, and elementary education is well advanced. Sydney and Melbourne have each a university. The gov. is that of a British colony—a Governor, Legislative Council, and House of Assembly, except N. Australia, which is not yet constituted a colony.

The Aborigines are of the lowest type; they are of a sooty colour, live in holes in the earth, wear little clothing, and live on roots and fish; and their weapons are the spear, club, boomerang, and tomahawk. They are rapidly decreasing.

2. NEW ZEALAND.

General Aspect.—New Zealand consists of a chain of Is., more than 1,100 m. in length. The surface is diversified. A chain of snow-clad mts. traverses the two northern Is. in the direction of their greatest length, with several volcanic peaks, the highest being Mt. Cook in South I., 13,200 ft.

BAYS AND STRAITS.

Hawke B., B. of Plenty, Haurā'ki G., Cook Str., Tas'man or Blind B., Foveaux' Str.

CAPES AND PENINSULAS.

C. Palliser, E. Cape, C. Col'ville, N. Cape, C. Eg'mont, C. Farewell', S. Cape, Bank's Pen.

PROVINCES AND TOWNS.

Well'ington.—WEL'INGTON.

Hawke B.—Na'pier.

Auck'land.—Auck'land.

Taranā'ki.—New Plym'outh.

Marl'borough.—Pic'ton.

Nel'son.—Nel'son.

Can'terbury.—Christ'church.

Otā'go.—Dune'din, Invercargill'.

Westland.—Hokiti'ki.

WELLINGTON, (*Port Nicholson*), first established of the N. Z. settlements. Auck'land, on the Hauraki G., (17,000,) largest town, till recently the seat of gov.; has steam communication with Sydney, Melbourne, Sandwich Is., and San Francisco. Dunedin, (13,000,) composed of emigrants from the Free Church of Scotland; extensive gold-fields in the neighbourhood.

CLIMATE, PRODUCTIONS, &c.—The climate is remarkably mild and salubrious. The country is covered with extensive vegetation, the tree-fern and kauri pine forming extensive forests; and N. Z. flax forms cordage of singular tenacity. Much of the soil is adapted either for agriculture or cattle-rearing. The domestic animals have been introduced by the colonists, and thrive well. There are no serpents or venomous reptiles, and the whale-fishery is successfully pursued. The mineral products are valuable and extensive, consisting of gold, iron-sand, coal, silver, &c. The people consist of Brit. emigrants and Maoris, chiefly in North Island, who are tall, well-built, intelligent, with glossy black hair, and copper complexion, belonging to the Malayan race. The Maoris are often at war with the colonists. Education is well attended to. The gov. is that of a Brit. colony.



NEW ZEALAND CHIEF WITH
TATTOOED FACE.

3.—PAPUA OR NEW GUINEA, &c.

General Aspect.—Papua is, next to Borneo, the largest I. on the globe, being 1,200 m. long, 300 broad, and 274,500 sq. m. in area. Pop. 1,000,000. Its form resembles that of a crocodile, with its head to Borneo and back to the Eq. The interior is very little known, except that it is very mountainous, rising in the E. to 13,000 ft. Forests cover a great portion of the area, and include the camphor-tree and sago-palm, while aromatic nutmeg, yams, and cocoa-nuts are plentiful. This is the native land of

the bird of paradise, and a huge pigeon as large as a turkey. The climate is exceedingly wet and unhealthy. The people are a puny, stunted race, with hair growing in tufts, turned-up noses, prominent lips, and sooty skin.

The other groups are *Antipodes I.*, *Norfolk I.*, the *Louisiade Archipelago*, *New Caledonia*, *New Hebrides*, *Queen Charlotte Is.*, *Solomon's Is.*, *New Britain*, *New Ireland*, *Admiralty Is.*

The *New Hebrides* consist of a long chain of volcanic Is. Odoriferous sandal wood is exported to China to be burned as incense in idol-temples. In *Erromanga*, one of them, the missionary Williams was murdered, in 1839. *Antipodes I.*, the land most nearly opposite *Gt. Britain*. *Norfolk I.*, lately used as a penal colony, now occupied by the *Pitcairn Islanders*.

II.—MALAYSIA.

General Aspect.—Malaysia, called also the Eastern, Indian, or Asiatic Archipelago, is the largest collection of islands on the globe. They are all of volcanic origin, and the two highest smts. are *Mt. Ophir*, 13,840 ft., in *Sumatra*, and *Kini Balu*, 13,698 ft., in *Borneo*.

DIVISIONS AND TOWNS.

1. *Sun'da Is.*, (viz.:—*Suma'tra*, *Ja'va*, *Ba'li*, *Lom'bok*, *Sumba'wa*, *Timor*, &c.)—*Acheen'*, *Palembang'*; *Bata'via*, *Samarang'*, *Souraba'ya*; *Soerkar'ta*, *Djokjokar'ta*.
2. *Borneo*, &c.—*Borneo*, *Sarawak*; *Pontia'nak*.
3. *Cel'ebes*, &c.—*Macas'sar*.
4. *Moluc'cas* or *Spice Is.*, (viz.:—*Gilo'lo*, *Ceram'*, &c.)—*Amboy'na*.
5. *Philippine' Is.*, (viz.:—*Luzon'*, *Mindana'o*, *Palawan'*, &c.)—*Manil'la*.

Largest Towns.—*Batavia*, 135,000, *Sourabaya*, 130,000, *Manilla*, 100,000, *Djok-jakarta*, 90,000, *Palembang*, 25,000, *Samarang*, 22,000, *Pontianak*, 20,000.

Java: in the interior is a poisonous valley, known as the 'Valley of Death,' in which no animal can live on account of poisonous gases; its forests contain the *Upas tree*, whose juices are very poisonous. *Java* is so fertile that it has been styled the 'Granary of the Archipelago.' *Batavia*, largest town, with gt. exports of finest spices. *Borneo*, divided by the Equator into two nearly equal portions. *Sarawak*, ruled by Sir James Brooke, who suppressed piracy, and greatly improved his subjects. *Labuan* contains valuable coal mines. *Celebes* and *Gilo'lo*, remarkable for irregular outlines. *Macassar oil* is the product of a common forest tree. The *Moluccas* yield the finest cloves, nutmegs, and other spices; on the coasts are pearl and trepang fisheries. The *Philippines* include 1,200 islands. The finest tobacco, sugar, and rice, are common products. *Manilla* cigars are famous. The *Philippines* are, next to *Cuba*, Spain's finest colony.

CLIMATE, PRODUCTIONS, &c.—The climate is moist, and the temperature is modified by sea-breezes. The vegetation is most luxuriant, second only to that of *Brazil*. The forest-trees include ornamental and dye-woods, caoutchouc, gutta percha, resins, and gums. The animals are similar to those of the S.E. of Asia, along with numerous birds of beautiful plumage, and there are edible birds' nests. The mineral products include gold, silver, tin, copper, iron, and coal. Most of the Is. are mountainous, and of volcanic origin; and they are visited with frequent earthquakes, hurricanes, and volcanic outbursts.

III.—POLYNESIA.

General Aspect.—The Is. are generally small, and are very beautiful. They are either low and coralline, or high and volcanic. The coral Is. are frequently surrounded by coral reefs, enclosing a piece of still water inside, with passages through, whilst others are quite round, with a lagoon or lake in the middle.

Polynesia is divided into two divisions, N. and S. of the Eq.:—

1. **Micronesia**—The Bonin' Is., Ladrone' or Marian' Is., Car'oline and Pelew' Is., the Marshall or Mul'grave Is., and the Sand'wich Is.
2. **Polynesia Proper, or South Sea Is.**—The Feejee' Is., Samo'a or Navigator's Is., Ton'ga or Friendly Is., Hervey or Cook's Is., Society Is., Aus'tral Is., Low Archipelago, the Marque'sas, and the Easter I.

Sandwich Is., ch. group in Polynesia, principal I., Hawa'i'i or Ow'hee, ch. town, Honolulu, in the I. of Oahu, pop. 14,000; has constant communication with China, San Francisco, and New Zealand. Hawaii has two stupendous volcanic summits, viz.:—Mow'na Kea, 13,951 ft., and Mow'na Loa, 13,758. Here Capt. Cook was killed by the natives, in 1779. **Hervey's Is.**: one of them, Rarotonga, made known by the missionary Williams, where he laboured with great success. **Society Is.**—Tahiti, the 'Gem of the Pacific,' extremely beautiful; the French claim a protectorate over these Is. **Pitcairn I.**—long occupied by the mutineers of the *Bounty* (1789) and their descendants.

CLIMATE, PRODUCTIONS, &c.—The climate is moist, tropical, and healthy. The vegetation is luxuriant, but without great diversity. The most valuable products are the bread-fruit tree and cocoa-nut palm, along with banana, plantain, sugar-cane, yam, arrow-root, &c. No native animal existed when the Is. were discovered by Europeans except dogs, hogs, and rats; but the sea teems with fish. The people are Malays, of a dark brown colour, use little clothing, practise tattooing, and are averse to industrious habits. The inhabitants were formerly idolators, licentious, infanticides, and cannibals; but in many instances they have been converted to Christianity.

ANTARCTICA.

Antarctica appears to be a south circum-polar continent. The farthest point S. is S. Victoria Land, 815 m. from the S. Pole, with an active vol., Mt. Erebus, 12,400 ft. high, and an extinct one, Mt. Terror, 9,000 ft. Probably the whole space within the Antarctic Circle is filled with land, forming a great Antarctic Continent, twice as large as Australia, nearly circular in form, covered with eternal snows, and devoid of vegetation.

EXERCISES.—Name from the map other heights in Australia and Tasmania. Name others in New Zealand, Papua, &c. Name the other pieces of land round the S. Pole, besides S. Victoria Land. Group the towns according to coast, river-basin, and pop. Classify them according to leading characteristics. Give the approximate distances, sailing and direct, bet. London and Sydney, Auckland, Batavia, and Manila. Draw maps of Australia, New Zealand, Malaysia, and Polynesia.

SACRED GEOGRAPHY.

PALESTINE OR CANAAN.

Boundaries.—N. Syria; E. Syria and Arabia; S. Arabia; W. Medit. or Great Sea, and Country of the Philistines.

Extent.—Length, 180 m.; breadth, about 50 m.; pop. 5,000,000.

General Aspect.—The country consists of continuations of the Lebanon and Anti-Lebanon ranges, with the deep Valley of the Jordan between. Of these two table-lands, the West is the most distinctly marked, being about 2,000 ft. high, while the Jordan, in its upper course, is 650 ft., and in the lower, 1,312 ft. below the level of the Medit. But hills and valleys variegates the region.

DIVISIONS.

ROMAN PROVINCES.

- I. Jude'a.—Tribes of Ju'dah, Ben'jamin, Sim'eon, Dan.
- II. Sama'ria.—Tribes of Eph'raim and Western Manas'seh.
- III. Galilee'.—Tribes of Issachar, Zeb'ulun, Naph'tali; Ash'er, in Phœni'cia.
- IV. Pere'a.—Tribes of Manas'seh beyond Jordan, Gad, Reu'ben.

MOUNTAINS.

- | | |
|---|---|
| Mt. Leb'anon , on the N. frontier, viz.: Lib'anus, on the W., and Anti-Lib'anus, on the E. | Quaranta'nia , bet. Jerusalem and Jericho. |
| Mt. Car'mel , N.W. of Manasseh. | Mt. of Ol'ives , E. of Jerusalem. |
| Mt. Ta'bor , in Zebulun. | Mta. of Ju'dah , W. of Judah. |
| Mt. Gilbo'a , in Issachar. | Mt. Seir , S. of the Dead Sea. |
| Mta. Eph'raim , E'bal, Ger'izim, and Ga'sash, all in Ephraim. | Mta. of Ab'arim , in Reuben. |
| | Mta. of Gil'ead , in Gad. |
| | Mt. Hermon and Hills of Ba'shan , in Eastern Manasseh. |

Lebanon, famous for cedar-trees: the few now standing 3,500 years old. Carmel, famous for the sacrifice of Elijah; another Mt. Carmel in Judah. Tabor, erroneously supposed to be the scene of Christ's transfiguration; from this hill Barak descended when he discomfited the host of Sisera. Gilboa: Saul and his three sons slain in battle with the Philistines. On Ebal and Gerizim the Israelites were assembled when the blessings and the curses of the law were proclaimed: on Gerizim the Samaritans built their temple. Quarantania, supposed to be the scene of our Lord's Temptation. Olivet: where our Saviour wept over the city of Jerusalem, and scene of the Ascension. Abarim Mts.: ch. smts.:—Nebo, Pisgah, and Peor. From Pisgah Moses viewed the Promised Land, and here he was buried.

PLAINS, WILDERNESSES, &c.

- | | |
|--|---|
| El Ghor or Plain of Jordan . | Val. of Jehosh'aphat , bet. Jerusalem and the Mt. of Olives. |
| Pl. of Jez'reel , in Issachar. | Pl. of Mam're , S. of He'bron. |
| Pl. of Sha'ron , along the coast of Ephraim and Manasseh. | Wild. of Jude'a , W. of Dead Sea. |
| Val. of A'chor , E. of Benjamin. | Valley of Salt , S. of the Dead Sea. |

The Pl. of Jordan, 70 m. long and 7 or 8 m. wide. Towards the S. it expands, forming on the E. the Pl. of Moab, and on the W. the Pl. of Jericho. Pl. of Jez'reel, also called Pl. of Esdrason, Val. of Magiddo, and the Great Pl., is 15 sq. m. in area; scene of many important battles. Val. of Achor: here Achan was stoned for taking of the spoil of Jericho. Val. of Jehoshaphat, called also

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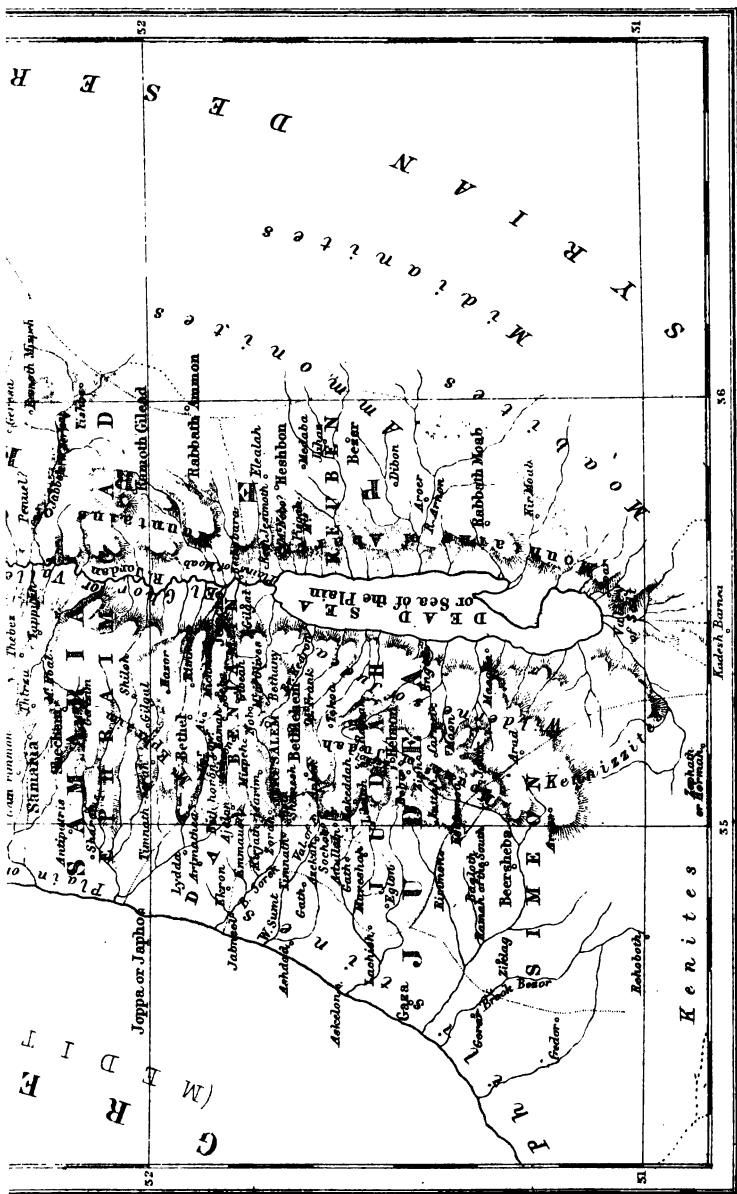
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PALESTINE.

English Miles
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Dead Sea

Jericho

Amman

Jerusalem

Hebron



the **Val. of Kedron**, a deep rugged ravine where the people of Jerusalem buried their dead. **Pl. of Mamre**, contained the burying-place of Sarah, Abraham, Isaac, and Jacob. The **Wild. of Judea** included the **Wildernesses of Engedi**, **Ziph**, **Maon**, and **Tekoah**. **Val. of Salt**: David gained a great victory over the Edomites.

MINOR VALLEYS were the **Pl. of Mo'rah**, now the **Valley of Nablous**, bet. Ebal and Gerizim—contains Joseph's Tomb and Jacob's Well; the **Val. of Hin'nom**, S.W. of Jerusalem, where the Jews sacrificed their children to Moloch; the **Val. of Beph'aim**, bet. Jerusalem and Bethlehem, where David twice def. the Philistines; the **Val. of E'lah**, N.W. of Judah, where David slew Goliath; the **Val. of Eshool**, near Hebron, whence the spies brought the grapes; the **Wild. of Beer-sheba**, in the S. of Simeon, in which Hagar and Ishmael wandered; and the **Val. of Ajalon**, near Gibeon, where the sun and moon stood still at the command of Joshua.

RIVERS.

Flowing into the Medit.

Ki'shon, in Issachar and Zebulon.

Ka'nah, bet. Ephraim and Manasseh.

So'rek, in N. of the Philistines.

Be'zor, in Simeon & Philistines.

Jor'dan, from Lebanon, flows S. through the Waters of Merom.

At **Kishon** Elijah slew the 400 prophets of Baal after his sacrifice at Carmel. **Jordan**, course 180 m., direct distance, 100 m.; remarkable for its passage by the Israelites and our Saviour's baptism. At **Cherith** Elijah was fed by ravens. Near **Jabbok** Jacob wrestled with the angel. The **Jordan** is the only perennial stream,—the others depending on the rainy season or the melting of snows.

and the Sea of Galilee to the Dead Sea.

Flowing into the Jordan.

Brook Che'rith, in Ephraim.

Br. Ke'dron, in N.E. of Judah.

R. Ar'non, in S. of Reuben.

R. Jar'muth, in Manasseh East.

Br. Jab'bok, in Gad.

LAKES.

Waters of Me'rom, E. of Naph-tali.

Sea of Galilee, E. of Zebulon.

Dead Sea, called also **L. Asphaltites**, **Salt Sea**, **Sea of Sodom**, and **Sea of the Plain**.

Waters of Merom, now called **Bahr-el-Huleh**, 7 × 4 m. Here Joshua def. the confederated kings of Canaan. **Sea of Galilee**, **Sea of Tiberias**, **Sea of Chinnereth**, and **Lake of Gennesareth**, 13 × 6 m.: here our Saviour wrought many miracles. **Dead Sea**, called 'Asphaltites,' from the abundance of asphalt or bitumen found in its waters; 'Sea of Sodom' and 'Sea of the Plain,' from covering the sites of Sodom and the cities of the Plain.

TOWNS.

Ju'dah.—**He'bron**, **Beth'lehem**, **Adul'lam**, **Makke'dah**, **Lib'nah**; **En'gedi**, **Ka'desh-Bar'nea**.

Ben'jamin.—**JERUSALEM**, **Beth'any**, **Gib'eah**; **Je'richo**, **Gil'gal**, **Beth'el**, **A'i**; **Ra'mah**, **Gib'eon**, **Em'maus**.

Sim'eon.—**Beer'sheba**, **Zik'lag**.

Dan.—**Zo'rah**, **Tim'nath**, **A'jalon**; **Dan** or **La'ish**, on the N. frontier.

Phil'istines' Cities.—**Jaffa**, **As'calon**, **Ga'za**, **Ek'ron**, **Ash'dod**, **Gath**.

Hebron, 20 m. S. of Jerusalem, one of the most anc. cities in the world; early cap. of David. **Bethlehem**, 6 m. S. of Jerusalem, b.-p. of our Saviour. **Adullam**: here David hid himself in a cave from Saul. **Makke'dah**: here the five kings def. at Gibeon were taken from a cave and hanged. **Libnah**: here Sennacherib was encamped when the Lord smote 185,000 of his army in one night. **Engedi**: here David surprised Saul in a cave. **Kadesh Barnea**: whence Moses sent the spies. **JERUSALEM**, the most interesting and renowned city in the world, built on four hills—**Zi'on**, **A'ra**, **Mori'ah**, and **Be'etha**; destroyed in A. D. 70. **Bethany**, 2 m. E. of Jerusalem; here our Lord raised Lazarus to life. **Jericho**

first city taken by the Israelites. **Gilgal**: here the Israelites were encamped while conquering Canaan. **Bethel**: here Jacob had a remarkable dream, and Jeroboam set up a golden calf. **Beerahaba**, reckoned the most southerly town in Canaan. **Jaffa** or **Joppa**: here Jonah embarked for Tarshish; ch. port of Palestine. **Ashdod**, famous for the temple of Dagon.

Eph'raim.—She'chem, Sama'ria, Tir'zah; Sha'ron, Tim'nath-se'rah, Shi'loh.

Manasseh (Half tribe of).—Cæsare'a, Do'than.

Shechem or **Sychar**: near this was Jacob's Well. **Samaris** or **Sebaste**, latter cap. of Km. of Israel; Shechem or Tirzah had formerly been the cap. **Tirzah**: here Zimri fired the palace, and perished in the ruins. **Shiloh**: here the tabernacle remained 330 years. **Cæsarea**, cap. of Herod, and the usual residence of the Roman governors. **Dothan**: Joseph sold to the Ishmaelites.

Issachar.—Jez'reel, Shu'nem, Na'in, En'dor, Megid'do, Bethshan'.

Zebulun.—Nazareth, Ca'na; Tibe'rias, Mag'dala.

Naph'tali.—Ha'zor, Sa'phet; Ke'desh, Capernaum, Chora'zin.

Asher.—Si'don, Sarepta, Tyre, A'cre.

Jez'reel or **Ezdra'elon**, favourite residence of Ahab and Jezebel: here Naboth was stoned to death, and Jezebel devoured by dogs. **Shunem**: here Elisha restored to life the son of his hostess. **Nain**: here our Saviour raised the widow's son to life. **Endor**: here the witch raised Samuel. **Megiddo**: here Josiah was mortally wounded. **Nazareth**: residence of Joseph and Mary, and of Jesus till he began his ministry. **Cana**, scene of our Saviour's first miracle. **Capernaum**: here our Saviour frequently taught; called "Christ's own city." **Sarepta** or **Zarephath**: here Elijah raised the widow's son to life.

Eastern Manasseh.—Go'an, Ash'taroth, Ed'rei; Ja'besh-Gilead.

Gad.—Mahana'im, Bethab'ara, Ram'oth-Gilead, Tish'bé, Rab'-bath-Am'mon.

Reuben.—Be'zer or Boz'rah of the Wilderness, Ja'haz, Hesh'bon.

Ash'taroth, residence of Og, king of Bashan; **Edrei**, where he was slain. **Mahanaim**, strongest fortress E. of the Jordan. **Ramoth-Gilead**: Ahab was slain in battle with the Syrians. **Tiabbe**, b. p. of Elijah. **Rabbath-Ammon**, a city taken by Joab, David's captain. **Jahaz**, where Moses def. Sihon, king of the Amorites. **Cities of Refuge**:—Hebron, Shechem, Kedesh, W. of the Jordan; Golan, Ramoth-Gilead, Bezer, E. of the Jordan.

Original Inhabitants.—The **Philistines**, in the S.W.; **Am'orites**, W. of the Dead Sea, and E. of the Jordan; **Hittites**, in the W. of Judah; **Jeb'usites**, in the N. of Judah; **Ca'naanites** and **Per'izzites**, W. of the Jordan; **Hiv'ites**, the country at the foot of Lebanon and Hermon; **Sidonians**, in the N.W.; **Gir'gashites** or **Gergesenes**, E. of the L. of Gennesareth; and the **Am'monites**, E. of the Jordan.

Neighbouring Nations.—The **Am'alekites**, S. of Judah, occupying part of Edom; the **Mo'abites**, E. of the Dead Sea; the **Mid'ianites**, S.E. of the Dead Sea, occupying part of Cush or Arabia; the **Land of Uz**, S. of the Midianites; the Km. of Zo'bah, E. of Manasseh; and the Km. of Damas'cus, N. of Zobah.

CLIMATE, PRODUCTIONS, &c.—The climate is warm, but generally mild and agreeable. In summer the heat is often oppressive, yet the nights are cool, with refreshing dews. The "early rain" falls in Nov., when wheat and barley are sown; the "latter rain" in Ap. preceding harvest. The ch. vegetable products are wheat and barley, olive, fig, and vine; and of the forest trees, the oak, terebinth, myrtle, and sycamore, are the most common, but the palm is now rare. The wild animals are the panther, fox, and bear, the lion being now seldom met with. The domestic animals are the ox, sheep, and goat, while asses and mules are the beasts of burden. The chief minerals are iron and copper.

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